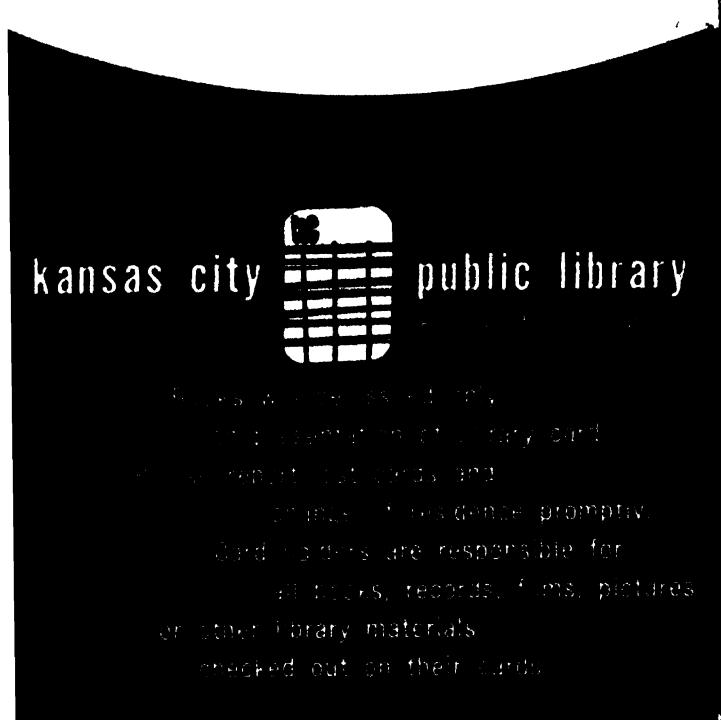


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# **A R T I S T I C A N A T O M Y**

**By WALTER FARRINGTON MOSES**

*Revised and Enlarged Edition*

**LOS ANGELES, CALIFORNIA**

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## PREFACE

Art instructors and art students everywhere have long sought a clearly presented direct-to-the-point anatomy which would meet their requirements, from the viewpoint of the artist with the thoroughness of the surgeon.

“Artistic Anatomy”, in its newly revised and augmented edition, is the answer to this demand. It contains 147 separate drawings showing muscle and bone structure and their relationship to each other. These drawings are exceptional in their clear-cut presentation.

Concise yet complete explanations are found on each page opposite the drawings. A general introduction and a glossary complete the anatomical information. The book has been designed particularly for the beginning student to start him along the road of drawing the human figure by a thorough foundation of the mechanism of the human anatomy.

Acknowledgement is due to the late Dr. Monte Salvin for his conscientious work in preparing the introduction and text, which by its clear concise explanatory notes in addition to the drawings, will give the student a full understanding of the subject.

Thanks are due to Mr. Walter W. Greeven for his permission to use the photograph printed on the cover and the publishers are indebted to Mr. Lawrence Kane for helping to prepare portions of the manuscript and correcting proof.

## INTRODUCTION

The study of the human anatomy logically begins with the bony framework of the body which constitutes the skeleton and the muscles which preserve its shape.

In the full grown adult there are a total of 206 bones, the bones of the skull containing 22, the spine 26, the ribs and breastbone 25, the upper extremities 64, the hyoid of the neck 1, the lower extremities 62 and those of the ears 6.

To the upper extremities belong, on each side, the shoulder blade or *Scapula*, the collar bone or *Clavicle*, the long bone of the upper arm or *Humerus*, the two bones of the forearm, the *Radius* and *Ulna*, and the smaller bones of the wrist and hand. To the lower extremities belong the bones which comprise the *Pelvis*, the long bone of the upper leg or *Femur*, the two bones of the lower leg known as the *Tibia* and *Fibula* and the smaller bones of the foot and toes.

Because of characteristic peculiarities of the skeleton, a brief description of the special structures is here given. At birth the skull is large in proportion to the other parts of the skeleton, and although one thinks of this portion as a solid bone, actually the skull consists of a number of bones which unite together at or soon after birth. In the child there is little difference between the skull of the female and that of the male, but as adulthood is reached, we find that the skull of the adult female is lighter and smaller, its walls are thinner, its muscular ridges less strongly marked, the contour of the face is more rounded, the bones of the face are smoother and the jaws and teeth smaller. It can be seen that more of the infantile characteristics are retained in the skull of an adult female than in that of the adult male.

The chest or *Thorax*, which contains and protects the principal organs of respiration and circulation, is a structure made up of bones and cartilage. The ribs bounding the *Thorax* are 24 in number, twelve of which are situated on either side, connecting in

the back with the thoracic vertebrae. The first seven pairs are joined with the breastbone or *Sternum* in front and are known as true ribs due to their attachment. The remaining five pairs are termed false ribs, while the lower two of these are called floating ribs. All the ribs are convex and slope downward to allow ample space for the organs contained in the chest, hence the name *Thoracic Cage*.

The spine is a flexible weight-bearing column made up of a series of vertebrae, having a hollow interior for the transmission of the *Spinal Cord*, and separated from each other by intervertebral discs. These discs serve to diminish the jar of walking, while the bony hollow of the vertebrae serves to protect the *Spinal Cord*. The spine is divided into five regions corresponding to the parts of the trunk with which it is connected. The cervical region comprises the seven upper vertebrae, the thoracic, twelve, the lumbar, five, the sacral, five fused vertebrae and the coccygeal, 4 to 5 vertebrae.

The length of the spine is quoted by different anatomists to be shorter in the woman than in the man, the average spine being approximately 28 inches. However, although this may vary somewhat, the estimation of length is about 40 per cent of the total height of the individual. It is well for the art student to know that in its most natural, easy and graceful position, the body is not erect, due to the fact that the spinal column is waved and curved.

The *Pelvis*, so called from its resemblance to a basin, is a bony ring supporting the spinal column and resting upon the lower limbs. It is composed of four bones: the two hip bones, one on each side and in front, and the *Sacrum* and *Coccyx* of the spine behind. The female pelvis is distinguished from that of the male by its bones being more delicate and its depth less. The upper opening of the female pelvis is larger and more nearly circular, the cavity shallower and wider, and its general structure less massive than that of the male. The

size of the *Pelvis* varies not only in the two sexes, but also in different members of the same sex, so that women of short stature as a rule have broad pelvis while the diameter of the average pelvis may be markedly decreased even in well-formed women of average height.

There are over 500 separate and distinct muscles connected with the bones, ligaments and skin, either directly or through fibrous structures called tendons. The most important movements of the human being are brought about by muscle, which has the power of contraction and expansion. Some muscles have the function of extending, such as in the arms or legs, while others may bend certain parts toward the body. Still others have circular contractions such as around the eye or the mouth. Each muscle, however, has another muscle with which it is counterbalanced and which returns it to its original position. This arrangement, by accumulating muscles into large masses in some places and withdrawing them from others, not only secures many mechanical advantages, but also contributes to the symmetrical appearance of the body by giving curved outlines to the trunk, limbs and ankles.

These displacements and replacements therefore have been given terms by which the various movements can be determined and are known as:

**DEPRESSION**—Act of lowering or pressing down

**ROTATION**—Act of twisting or revolving

**FLEXION**—Act of bending

**EXTENSION**—Act of unbending

**SUPINATION**—Turning the palm upward

**PRONATION**—Turning the palm downward

**ABDUCTION**—Bending away from the body

**ADDITION**—Bending back toward the body

**EVERSION**—Act of turning or twisting about

**ELEVATION**—Act of lifting up

The size of the muscle may be signified by the term *Maximus*—greater or larger, the term *Minimus*—lesser or smaller, the term *Longus*—long and the term *Brevis*—short.

The most important muscle of the neck is known as the *Sternocleidomastoid*, which turns the head from side to side and which is sharply defined in the male. The next group of muscles are those which cover the spine and upper back to the shoulders. These consist of the *Trapezius*, the *Pectoralis Major* and *Minor*, the *Deltoid* and the *Latissimus Dorsi*. The upper arm consists principally of the *Deltoid*, *Biceps* and *Triceps* muscles, while the lower arm consists of a number of *Extensor Muscles* on one side and *Flexors* on the other side, their function being to extend and bend the wrist and fingers. In addition to these, there is a *Pronator* which turns the arm downward, and a *Supinator* which turns the arm upward. The chest muscles consist mainly of the *Pectoralis Major* and *Minor* which are located over the upper ribs and upper arms. The abdominal wall is covered by a number of muscles ensheathed in a tissue called *Aponurosis* arising from the vertebrae and forming three muscular layers in front of the abdomen, known as the *External Oblique*, *Internal Oblique* and *Transversalis*—which join in the mid-line and enclose another muscle called *Rectus Abdominis*. The muscles which form the back are the *Trapezius* and the *Latissimus Dorsi* which are large and well formed in the muscular man.

The buttocks consist of three large muscles known as the *Gluteus Maximus*, *Gluteus Medius* and *Gluteus Minimus*, the last of which cannot be seen. These muscles arise from the hip bones and *Sacrum*, and are found on the outer side of the thigh. The muscles in the front of the thigh are known as the *Extensor* group, are four in number and are inserted into the knee. The muscles in the back of the thigh are known as the *Flexor* group, also called the hamstring muscles, and are the *Biceps*, *Semitendinosus* and *Semimembranosus*. The muscles of the lower leg consist of the *Gastrocnemius* and *Soleus*, which make up the calf of the leg and unite behind to form the *Tendon of Achilles*, and the *Flexors* of the toe and ankle.

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*Artistic*

*Anatomy*

## FULL FIGURE OF THE MALE SKELETON (FRONT VIEW)

A — CLAVICLE — Collarbone, which joins the breastbone in front and scapula in back (refer to pages 3, 6, 13, 23 and 57).

B — HEAD OF HUMERUS — The expanded portion of the long bone of the upper arm (refer to pages 3, 4 and 6).

C — STERNUM — The breast bone, forming the middle portion of the front wall of the chest (refer to pages 3, 5 and 57).

D — SCAPULA — The shoulder blade, a triangular bone behind the shoulder (refer to pages 6, 13 and 57).

E — HUMERUS — The long bone of the upper arm (refer to pages 3, 4 and 6).

F — RADIUS — The shorter bone of the forearm (refer to pages 4 and 57).

G — PELVIS — The bony ring which supports the spinal column, and rests upon the lower limbs; composed of the hip bones, the sacrum and coccyx (refer to page 3).

H — ULNA — The long bone of the forearm parallel to the radius (refer to pages 4 and 57).

I — SACRUM — The triangular bone which forms the back part of the pelvis (refer to page 12).

J — TROCHANTER OF FEMUR — The upper expanded part of the thigh bone (refer to pages 8 and 9).

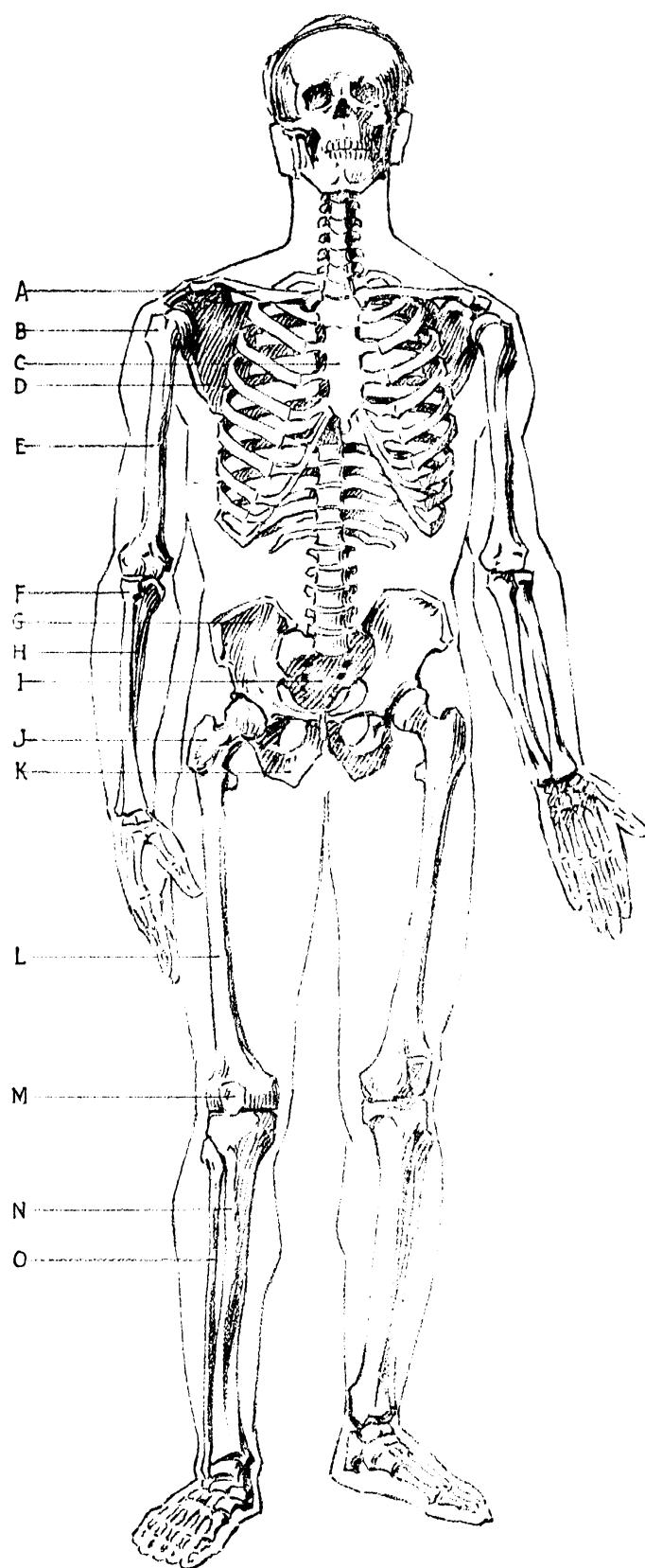
K — PUBIS — The front and lowermost part of the pelvis (refer to page 11).

L — FEMUR — The thigh bone located between the pelvis and the knee (refer to pages 8 and 9).

M — PATELLA — The knee cap, situated in front of the knee joint (refer to page 9).

N — TIBIA — The shin bone located in the lower leg (refer to pages 8 and 9).

O — FIBULA — The bone in the lower leg placed parallel with the tibia (refer to pages 8 and 9).



## THE SKULL (FRONT AND SIDE VIEWS)

A — PARIETAL BONE — A four cornered bone situated at the upper and side regions of the skull.

B — FRONTAL BONE — A bone which enters into the formation of the roofs of the eye and nose, and is continuous on its sides with the parietal bone.

C — NASAL BONES — The nasal bones, one on each side, form together the bridge of the nose by joining in the center.

D — TEMPORAL BONE — Situated at the sides and base of the skull and contains the organs of hearing.

E — ZYGOMATIC PROCESS — The portion of the temporal bone which extends forward to join the cheek bone and thus form the zygomatic arch.

F — MALAR — Or cheek bone situated at the outer and upper part of the face, aiding to form the socket of the eye and complete the zygomatic arch.

G — MASTOID PROCESS OF TEMPORAL BONE — Forms the back part of the temporal bone and serves for attachment of the sternocleidomastoid and muscles of the back of the neck.

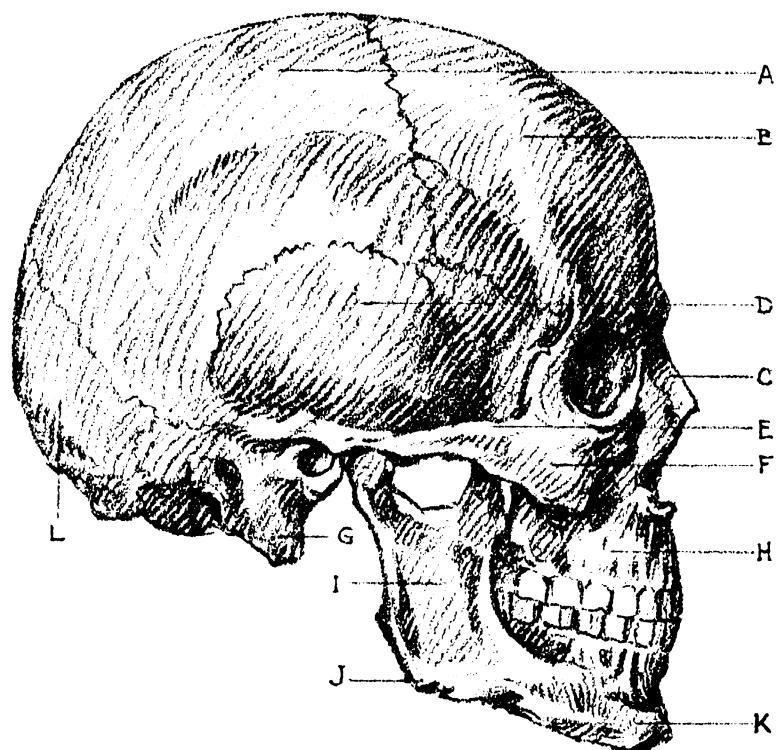
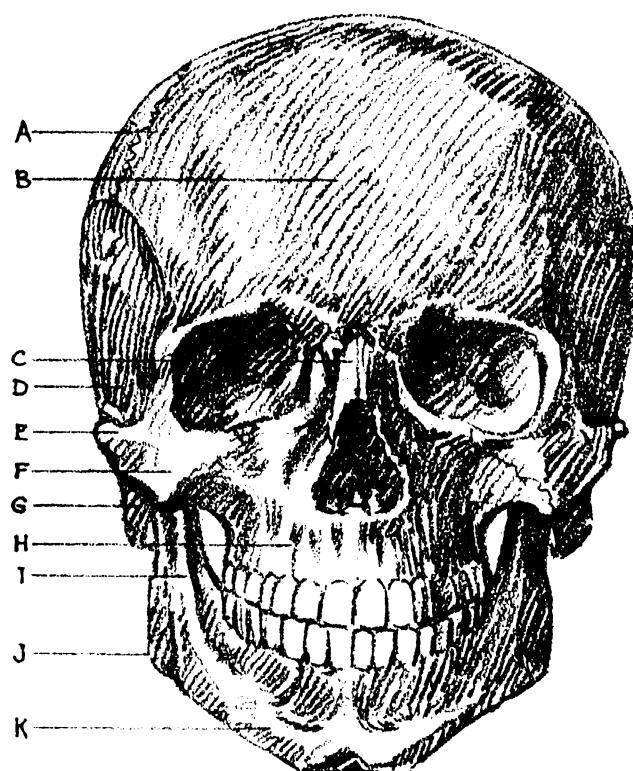
H — UPPER JAW BONE — Consists of two hollow bones together forming the upper jaw and the roof of the mouth and sockets for the upper teeth.

I — RAMUS OF LOWER JAW — The ascending portion of the lower jaw which is ridged for the attachment of the masseter muscle.

J — ANGLE OF LOWER JAW — A portion of bone beneath the ramus to which is also attached the masseter muscle.

K — MANDIBLE OR LOWER JAW — This is the largest and strongest bone of the face and serves for the reception of the lower teeth.

L — OCCIPITAL BONE — Situated at the back and lower part of the skull and is pierced by a large oval opening through which the lowermost division of the brain connects with the spinal cord.



## BONES OF THE TRUNK (FRONT VIEW)

A — CLAVICLE — Or collarbone, joins the breastbone in front and scapula in back.

B — ACROMION PROCESS OF THE SCAPULA — The summit of the shoulder, having a small oval surface which joins with the clavicle.

C — CORACOID PROCESS OF THE SCAPULA — A place of origin for the biceps brachii and coracobrachialis muscles.

D — STERNUM — The breastbone, forming the middle portion of the front wall of the chest, its upper end shown supporting the collarbones, or clavicles.

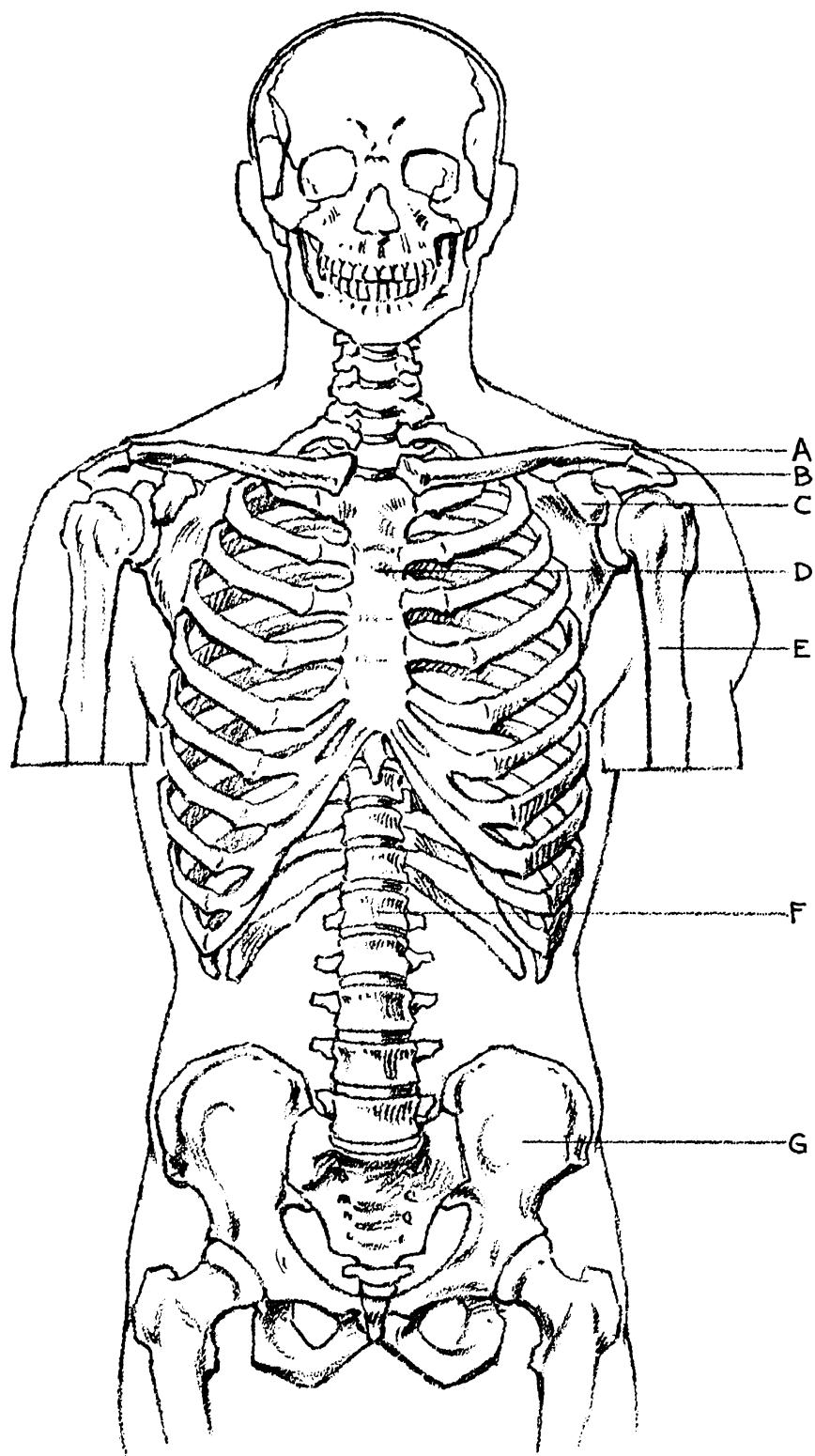
E — HUMERUS — The long bone extending from the shoulder to the elbow. It consists of an upper extremity or head, a middle part or body, and the lower extremity which joins the two bones forming the forearm, the ulna and radius.

F — SPINAL COLUMN — The bony framework which serves to support and maintain the shape of the body. The spinal column is a flexible column composed of a series of separate bones called the vertebrae, of which there are 33 in number, grouped under the names of

1. Cervical
2. Thoracic
3. Lumbar
4. Sacral
5. Coccygeal

The spinal column is situated in the center and back of the body. (Viewed from the front as in the illustration, the width of this group of bones is seen to increase in size from the region of the neck to the region of the trunk as far as below the center of the pelvis; then there is a marked decrease in size at its very lowest extremity).

G — PELVIS — A bony cavity massively constructed to support the spine. It is composed of four bones, two hip bones on each side and two behind, the sacrum and the coccyx. There is a decided difference between the male and female pelvis; that of the male being marked by the massiveness of its bones, while the female pelvis is characterized by a more shallow but wide pelvic opening. The flat upper portion of the hip bone to which the letter "G" is appended in the illustration is the ilium. The lower front part of the hip bone is the pubis, the lower back part the ischium.



## BONES OF THE ARM AND FOREARM

A -- FRONT VIEW OF HUMERUS

B -- BACK VIEW OF HUMERUS

C -- BACK VIEW OF HUMERUS

D -- SIDE VIEW OF HUMERUS

E -- FRONT VIEW OF RADIUS AND Ulna

F -- BACK VIEW OF RADIUS AND Ulna

G -- INSIDE VIEW OF RADIUS AND Ulna

H -- SIDE VIEW OF RADIUS AND Ulna

I -- HUMERUS -- The upper part showing its large rounded head joined to the body by a narrower portion called the neck (refer to pages 3 and 6).

J -- INNER CONDYLE -- Is the larger condyle and gives attachment to the flexor muscles of the hand.

K -- OUTER CONDYLE -- Is small and serves as an attachment for the extensor muscles of the hand.

L -- Ulna -- The upper part of the ulna is thick and strong and forms a large part of the elbow.

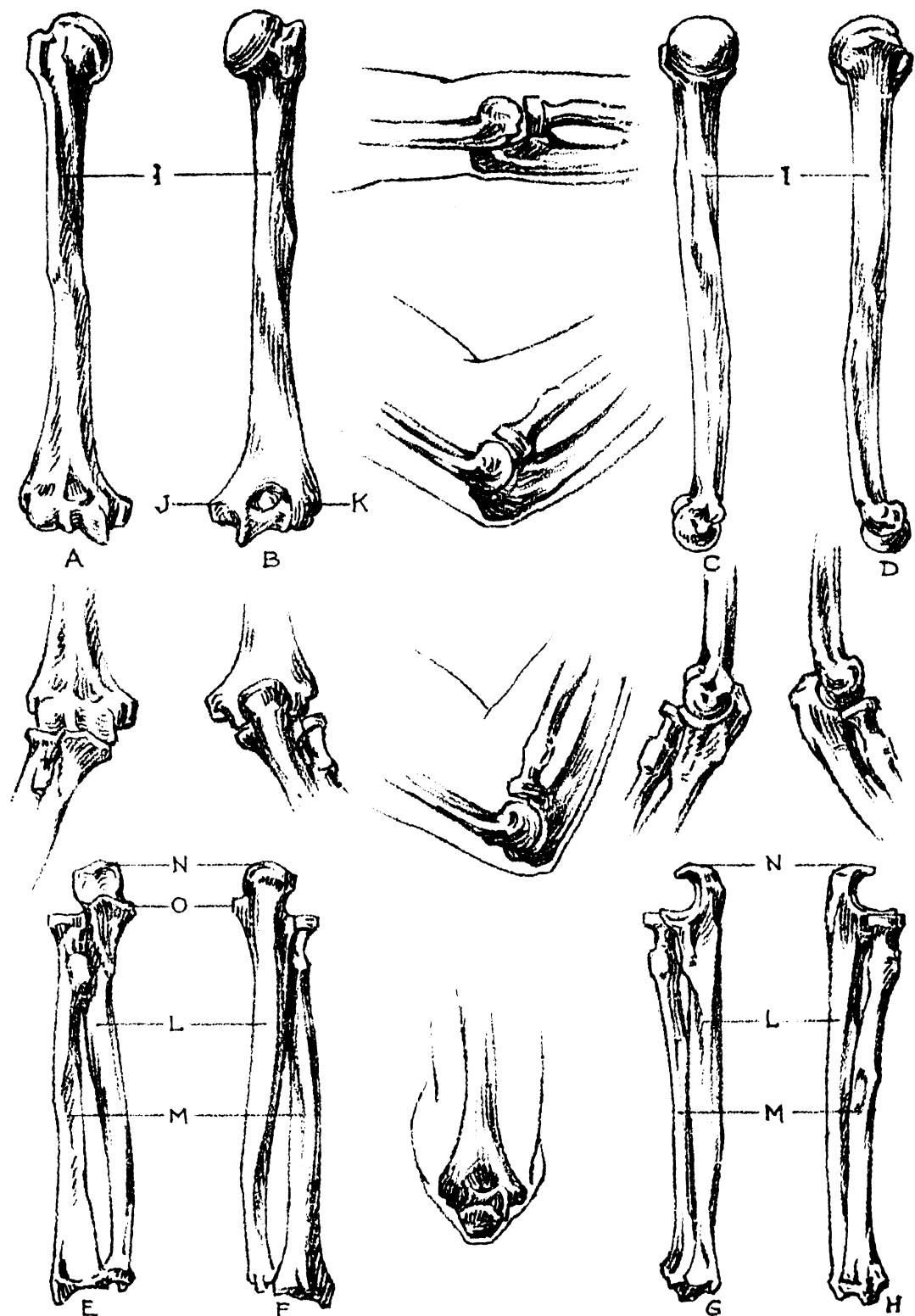
M -- RADIUS -- The middle part of this bone is narrower above than below and is slightly curved.

N -- OLECRANON PROCESS OF THE Ulna -- Is a thick part of the upper back part of the ulna.

O -- CORONOID PROCESS OF THE Ulna -- Is a triangular projection of bone in the upper and front part of the ulna. The humerus fits in between the olecranon and coronoid and joins with the ulna.

The bone of the upper arm which joins with the shoulder blade above and the two bones of the forearm below, the radius and ulna. The head of this bone is rounded and smooth to be admitted into the socket of the scapula. The shaft is rounded above and flattened below, having points of attachment for shoulder muscles.

The radius and ulna are the two bones which form the forearm; the radius is the smaller of the two, its rounded head joining with the humerus above; the ulna placed on the little finger side of the forearm alongside the radius is larger, extending from the elbow to the wrist.



**BONES AND MUSCLES OF THE FEMALE FULL FIGURE (FRONT VIEW)**  
**(BONES)**

- A — CLAVICLE OR COLLARBONE** — Joins the breastbone in front and scapula in back (refer to pages 1 and 6).
- B — ACROMION PROCESS OF THE SCAPULA** — The summit of the shoulder (refer to page 3).
- C — SCAPULA OR SHOULDER BLADE** — A triangular bone behind the shoulder (refer to page 6).
- D — STERNUM** — The breastbone, forming the middle portion of the front wall of the chest (refer to page 3).
- E — HUMERUS** — The long bone of the upper arm (refer to pages 3 and 4).
- F — RADIUS** — The shorter bone of the forearm (refer to page 4).

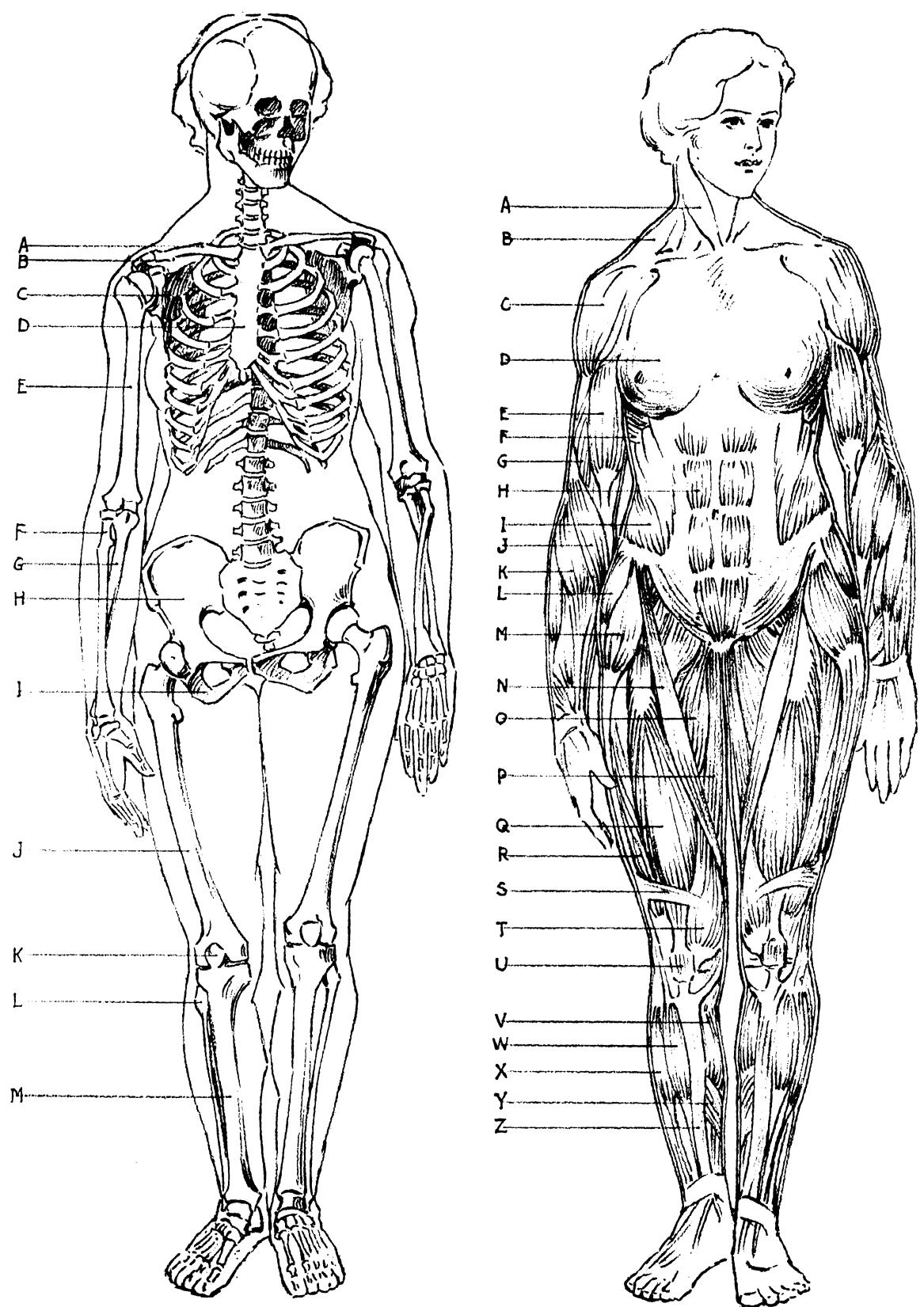
**(MUSCLES)**

- A — STERNOCLIDOMASTOID** — A muscle originating from the sternum and the clavicle and inserting into the mastoid process of the temporal bone, its action being to rotate and flex the head.
- B — TRAPEZIUS** — A muscle originating from the occipital bone and all the thoracic vertebrae, inserting into the clavicle and scapula, its action being to draw the head backward and sidewise and rotate the scapula.
- C — DELTOID** — A muscle originating from the clavicle, acromion and spine of scapula, and inserting into the upper outer side of the humerus, its action being to raise the arm and aid in carrying it backward and forward.
- D — MAMMARY GLANDS** — Also known as the mammae, or the breasts (refer to page 10).
- E — BICEPS BRACHII** — A muscle originating from the coracoid process, inserting into the radius, its action being to flex, supinate and adduct the forearm and arm.
- F — SERRATUS MAGNUS** — A muscle originating in the eight upper ribs, inserting into the scapula, its action being to pull the scapula forward and rotate it.
- G — BRACHIALIS ANTICUS** — A muscle originating in the lower half of the humerus on the front surface, inserting into the base of the coronoid process of the ulna, its action being to flex the forearm.
- H — RECTUS ABDOMINIS** — A muscle originating in the pubis, inserting into the fifth, sixth and seventh ribs, its action being to compress the abdomen and flex the body.
- I — EXTERNAL OBLIQUE** — A muscle originating in the eight lower ribs, inserting into the crest of ilium and pubis, its action being to compress the abdomen.

- G — ULNA** — The longer bone of the forearm (refer to page 4).
- H — PELVIS** — The bony ring which supports the spinal column and rests upon the lower limbs (refer to pages 1 and 3).
- I — PUBIS** — The front and lowermost part of the pelvis (refer to page 1).
- J — FEMUR OR THIGH BONE** — Situated between the pelvis and the knee (refer to pages 8 and 9).
- K — PATELLA** — A triangular bone situated in front of the knee joint (refer to page 9).
- L — FIBULA** — The bone in the lower leg placed parallel with the tibia (refer to pages 8 and 9).
- M — TIBIA OR SHIN BONE** — The larger bone of the lower leg (refer to pages 8 and 9).

- J — BRACIORADIALIS** — A muscle originating in the outer condyle of the humerus (the elbow), inserting into the lower end of the radius, its action being to flex the forearm and supinate it.
- K — EXTENSOR CARPI RADIALIS LONGIOR** — A muscle originating in the humerus and inserting into the metacarpal of the index finger, its action being to extend and abduct the wrist.
- L — GLUTEUS MEDIUS** — A muscle originating in the ilium, inserting into the great trochanter, its action being to rotate, abduct and extend the thigh.
- M — TENSOR FASCIAE LATAE** — A muscle originating in the upper part of the ilium, inserting into the fascia lata, its action being to tense the thigh.
- N — SARTORIUS** — A muscle originating in the superior ilium, inserting into the upper part of the inner side of the tibia, its action being to flex the hip and knee and rotate the leg.
- O — ADDUCTOR LONGUS** — A muscle originating in the pubis, inserting into the femur, its action being to adduct and flex the thigh.
- P — GRACILIS** — A muscle originating in the pubis and ischium, inserting into the inner surface of the tibia, its action being to flex and adduct the leg and thigh.
- Q — RECTUS FEMORIS** — A muscle originating in the anterior portion of the ilium, inserting into the tibia, its action being to extend the leg. The ligament of insertion of the rectus femoris, the patellar ligament, contains the patella, which is imbedded inside of the patellar ligament.
- R — VASTUS LATERALIS** — A muscle originating in the great trochanter and tubercle of the femur, inserting into the knee, its action being to extend the knee.

*(Continued on Page 6)*



S -- **BAND OF RICHTER** -- A fibrous band running from the lower inner side of the thigh outward and upward; it strengthens the thigh.

T -- **VASTUS MEDIALIS** -- A muscle originating in the femur and inserting into the knee, its action being to extend the leg.

U -- **PATELLA** -- A triangular bone situated in front of the knee joint.

V -- **GASTROCNEMIUS** -- A muscle originating in the condyles of the femur, inserting into the os calcis (heel bone), its action being to extend the foot and flex the leg. This is the important muscle which extends the foot at the ankle joint. Together with the assisting soleus, this muscle is constantly called into use in standing, walking and leaping.

W -- **TIBIALIS ANTERIOR** -- A muscle originating in the upper part of the tibia, inserting into the great toe, its action being to elevate the inner border of the foot.

X -- **PERONEUS LONGUS** -- A muscle originating in the head of the fibula, inserting into the great toe, its action being to extend, abduct and evert the foot.

Y -- **SOLEUS** -- A muscle originating in the fibula and tibia, inserting into the os calcis, its action being to extend the foot and rotate it inward.

Z -- **TIBIA OR SHIN BONE** -- The larger bone of the lower leg (refer to pages 8 and 9).

#### BONES OF THE TRUNK (SIDE VIEW)

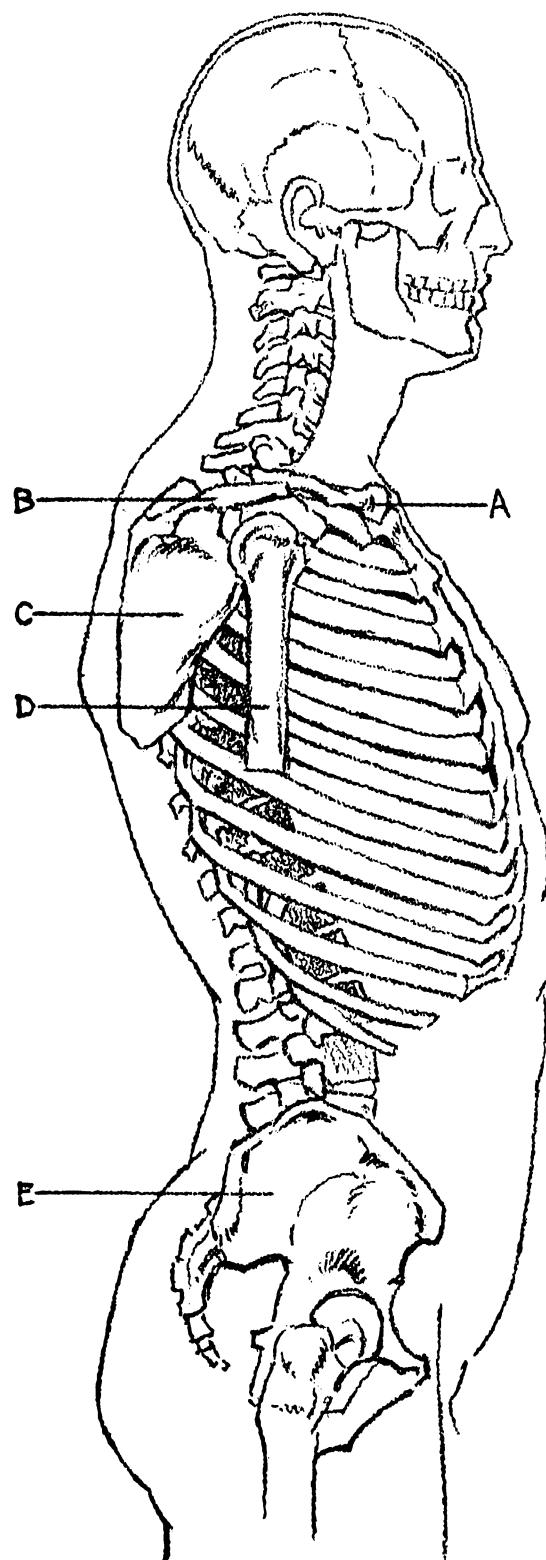
A -- **CLAVICLE** -- Or collarbone forms the front part of the shoulder girdle and is placed nearly horizontally at the upper part of the chest above the first rib (refer to pages 3, 13, 23 and 57).

B -- **SPINE OF SCAPULA** -- A bony ridge for attachment of the trapezius and deltoid muscles.

C -- **SCAPULA** -- Or shoulder blade, a flat triangular bone which forms the back part of the shoulder girdle (refer to page 57).

D -- **HUMERUS** -- The longest and largest bone of the upper extremity, joins the scapula above, and the ulna and radius below (upper portion shown) (refer to pages 3 and 4).

E -- **PELVIS** -- Composed of four bones (refer to page 3). Drawing shows hipbone (a part of the pelvis).



## BONES AND MUSCLES OF THE ARM (SIDE VIEW)

A — CLAVICLE — The collarbone, side view, (refer to pages 3, 6, 13, 23 and 57).

B — ACROMION PROCESS — The summit of the scapula or shoulder blade (refer to page 3).

C — SCAPULA — The shoulder blade as shown in side view.

D — HUMERUS — The bone of the upper arm (refer to pages 3, 4 and 6).

E — RADIUS — The smaller of the two bones of the forearm (refer to pages 4 and 57).

F — ULNA — The larger of the two bones of the forearm (refer to pages 4 and 57).

G — TRAPEZIUS — A muscle which rotates the head backward and sidewise and rotates the scapula (refer to page 5).

H — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

I — BICEPS BRACHII — A muscle originating in the humerus and scapula, inserting into the ulna, its action being to extend the arm and forearm (refer to page 13).

J — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).

K — BRACHIALIS ANTICUS — A muscle originating in the front surface of the lower half of the humerus, inserting into the ulna, its action being to flex the forearm.

L — BRACHIORADIALIS — A muscle which supinates the hand (refer to page 5).

M — EXTENSOR CARPI RADIALIS LONGIOR — A muscle which extends and abducts the wrist (refer to page 5).

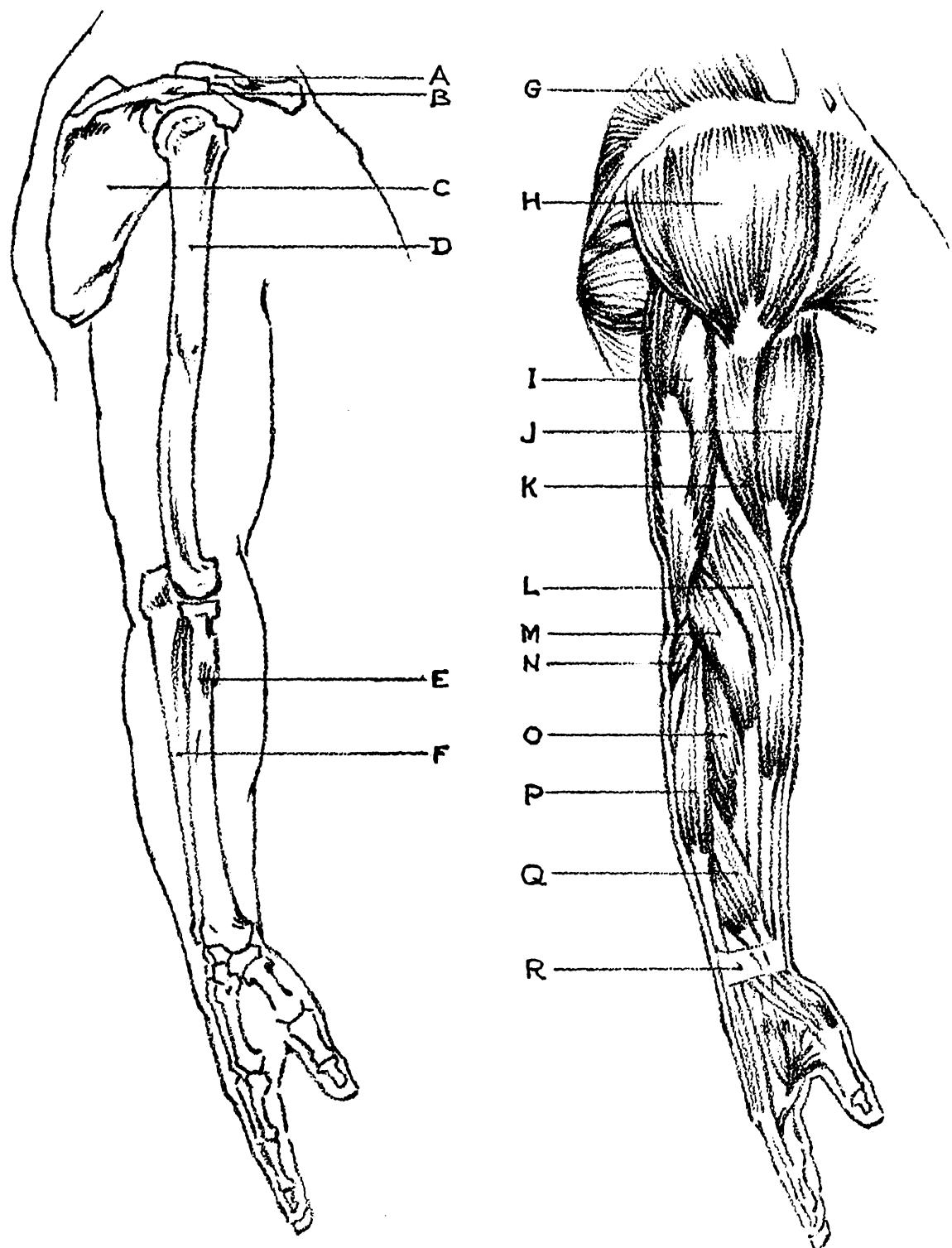
N — ANconeus — A muscle originating in the humerus, inserting into the ulna, its action being to extend the forearm.

O — EXTENSOR CARPI RADIALIS BREVIOR — A muscle originating in the external condyle of the humerus, inserting into the third metacarpal bone, its action being to extend and abduct the wrist.

P — EXTENSOR COMMUNIS DIGITORUM — A muscle originating in the humerus, inserting into the second and third fingers, its action being to extend the fingers.

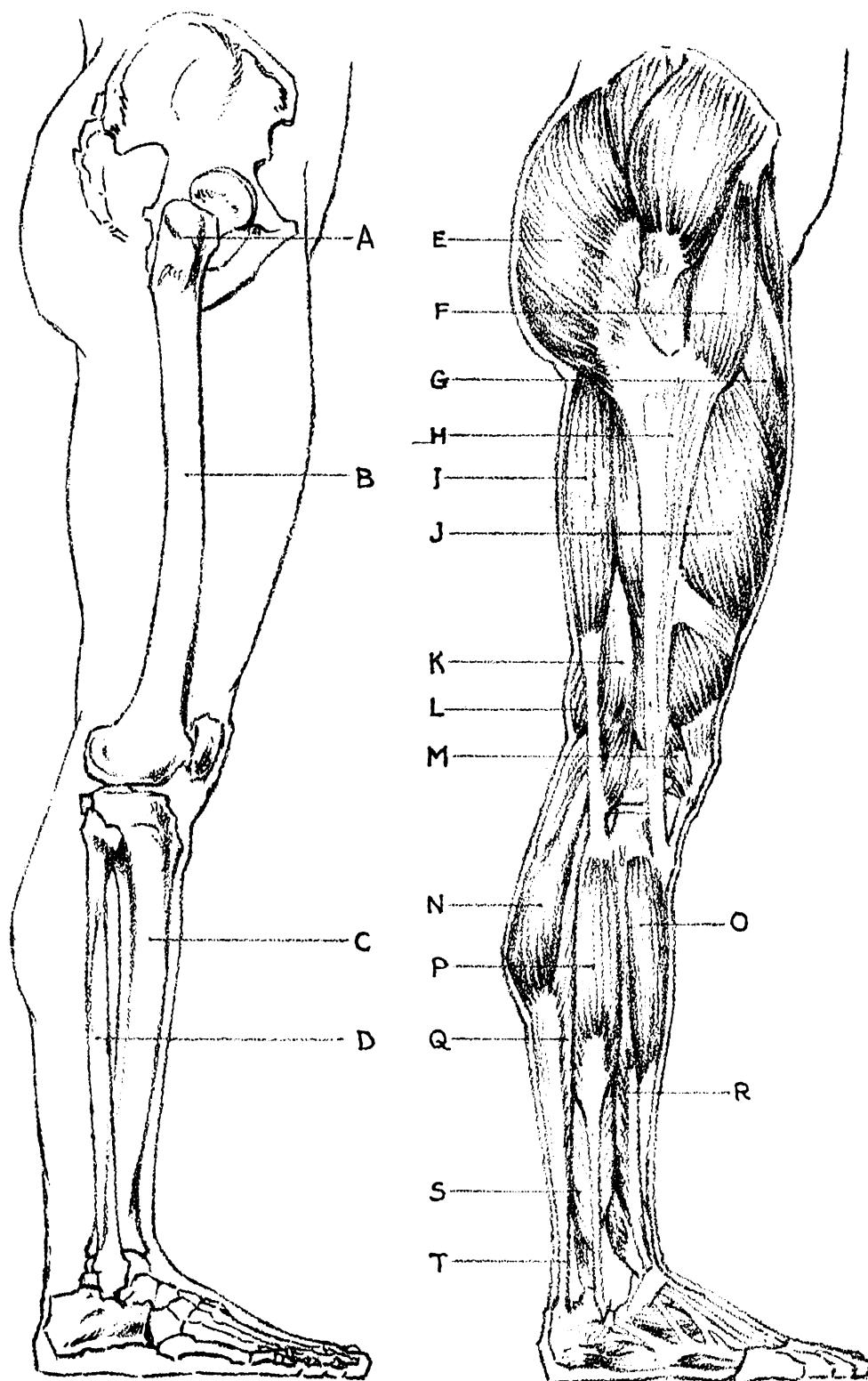
Q — EXTENSORS OF THE THUMB — Small muscles originating from the radius and ulna, inserting into the thumb, their action being to extend the thumb.

R — POSTERIOR ANNULAR LIGAMENT — A fibrous band which encircles the wrist and strengthens it.



## BONES AND MUSCLES OF THE THIGH AND LEG (SIDE VIEW)

- A — TROCHANTER OF FEMUR — Side view (refer to page 9).
- B — FEMUR — Side view (refer to page 9).
- C — TIBIA — Side view (refer to page 9).
- D — FIBULA — Side view (refer to page 9).
- E — GLUTEUS MAXIMUS — A muscle originating in the ilium, sacrum and coccyx, inserting into the femur, its action being to extend, abduct and rotate the thigh outward.
- F — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).
- G — RECTUS FEMORIS — A muscle which extends the leg (refer to page 5).
- H — ILIOTIBIAL BAND — A ligamentous band originating in the ilium, inserting into the tibia on the side of the thigh, its action being to strengthen the thigh and leg.
- I — BICEPS FEMORIS (LONG HEAD) — The long head of the muscle originates in the ischium, inserts into the head of the fibula, its action being to flex the knee and rotate it outward.
- J — VASTUS LATERALIS — A muscle which extends the leg (refer to page 5).
- K — BICEPS FEMORIS (SHORT HEAD) — The short head of the muscle originates in the central third of the shaft of the femur, inserting into the fibula and tibia, its action being to flex and rotate the knee outward.
- L — SEMIMEMBRANOSUS — A muscle originating in the ischium, inserting into the femur and tibia, its action being to flex the leg and rotate it inward.
- M — VASTUS INTERMEDIUS — A muscle originating in the femur and inserting into the knee, its action being to extend the leg.
- N — GASTROCNEMIUS — A muscle which extends the foot and flexes the leg (refer to page 6).
- O — TIBIALIS ANTICUS — A muscle which elevates the inner border of the foot (refer to page 6).
- P — PERONEUS LONGUS — A muscle which extends, adducts and everts the foot (refer to page 6).
- Q — SOLEUS — A muscle which extends the foot and rotates it inward (refer to page 6).
- R — EXTERIOR LONGUS DIGITORUM — A muscle originating from the tibia and upper portion of the fibula, inserting into the four lesser toes, its action being to extend the lesser toes.
- S — PERONEUS BREVIS — A muscle originating from the fibula and inserting into the foot, its action being to extend the foot.
- T — TENDON OF ACHILLES — A common tendon through which the gastrocnemius and soleus muscles insert on the os calcis or heel bone.



## BONES OF THE THIGH AND LEG

A — FRONT VIEW OF FEMUR

B — BACK VIEW OF FEMUR

C — SIDE VIEW OF FEMUR

D — INSIDE VIEW OF FEMUR

E — FRONT VIEW OF TIBIA AND FIBULA

F — BACK VIEW OF TIBIA AND FIBULA

G — SIDE VIEW OF TIBIA AND FIBULA

H — INSIDE VIEW OF TIBIA AND FIBULA

I — GREATER TROCHANTER OF FEMUR — A broad rough part of the femur directed outward and backward, to which the gluteus and vastus muscles are attached.

J — LESSER TROCHANTER OF FEMUR — A smaller projection of the femur bone cone-shaped for the iliopsoas muscle.

K — PATELLA — A flat triangular bone situated in front of the knee joint. It serves to protect the front of the joint and increases leverage by assisting the extensor muscles of the leg to act at a greater angle. It is not considered in the true sense of the word as a bone, as it is imbedded in the rectus femoris tendon and therefore these two bones, one on each knee, are omitted from the total bones of the human skeleton.

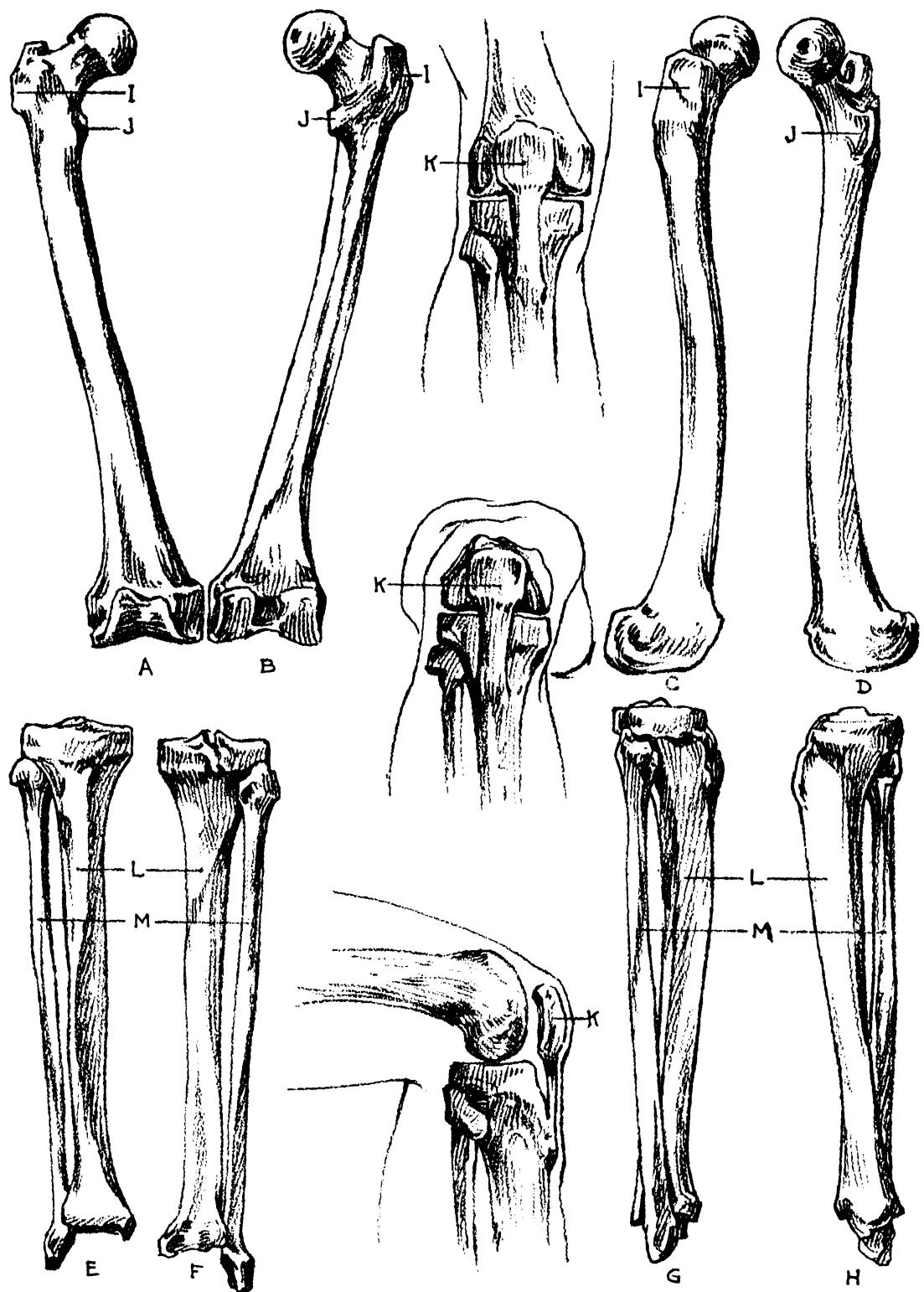
L — TIBIA — Refer to E, F, G, H.

M — FIBULA — Refer to E, F, G, H.

The thigh bone, is the longest, largest and strongest bone in the entire body. In standing position, it forms the side of a triangle, the greatest breadth being at the pelvis, and gradually inclining toward the center at the knees. The degree of this triangle varies in different persons and is greater in breadth in the female.

These two bones and the kneecap form the leg. The tibia, known as the shin bone, ranks next to the femur in respect to size and length.

The fibula is a long slender bone placed nearly parallel with the tibia on the outer side of the leg; its upper portion does not enter into the formation of the knee, but its lower portion does form the outside of the ankle.



**BONES AND MUSCLES OF THE FEMALE FULL FIGURE**  
**(SIDE VIEW)**

**(BONES)**

- A --- CLAVICLE OR COLLARBONE --- Joins the breastbone in front and the scapula in back (refer to pages 3, 6, 13 and 57).
- B --- SCAPULA OR SHOULDER BLADE --- A triangular bone behind the shoulder (refer to page 6).
- C --- HUMERUS --- The long bone of the upper arm (refer to pages 3, 4 and 6).
- D --- ULNA --- The longer bone of the forearm (refer to pages 4 and 57).
- E --- RADIUS --- The shorter bone of the forearm (refer to pages 4 and 57).
- F --- PELVIS --- The bony ring which supports the spinal

column and rests upon the lower limbs (refer to pages 3, 6 and 12).

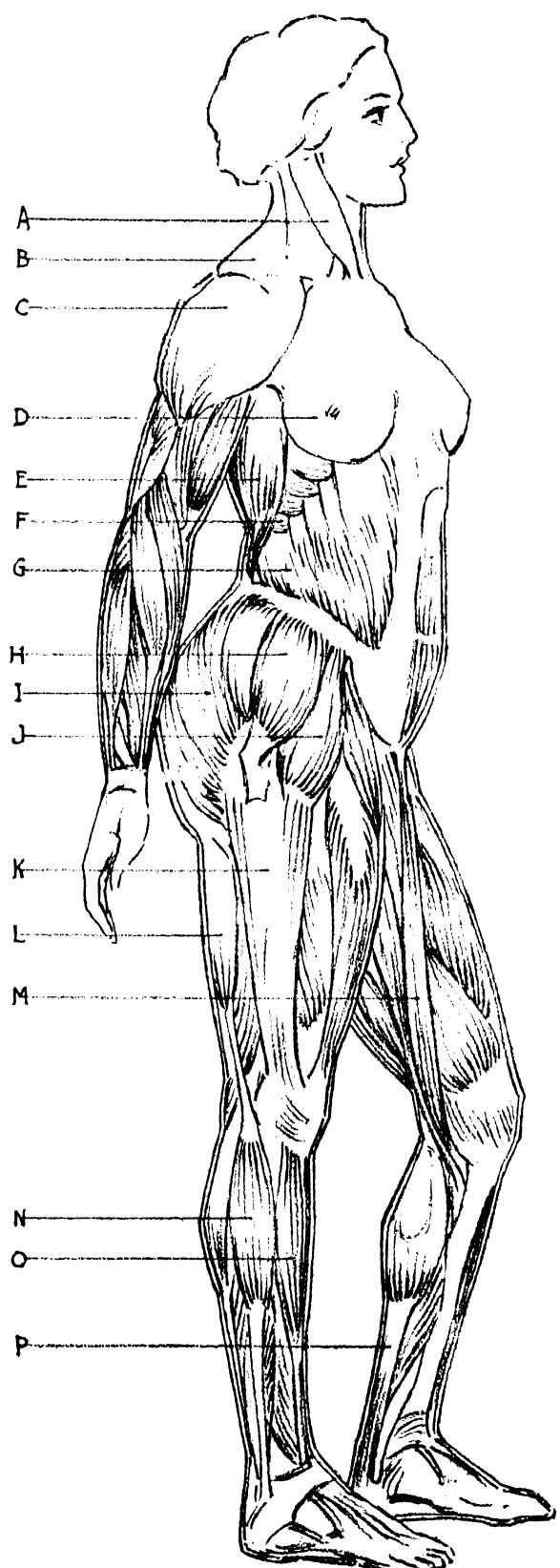
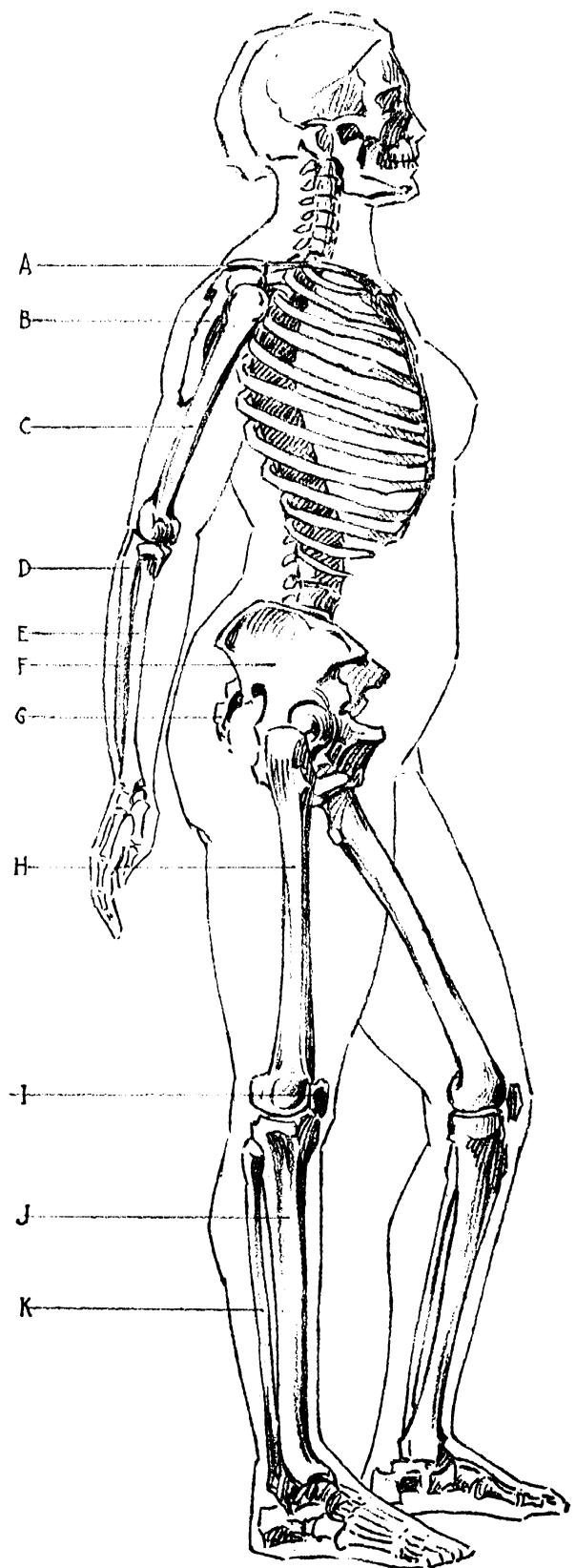
- G --- SACRUM --- A bone forming the back of the pelvis (refer to page 12).
- H --- FEMUR OR THIGH BONE --- Situated between the pelvis and the knee (refer to page 9).
- I --- PATELLA --- A triangular bone situated in front of the knee joint (refer to page 9).
- J --- TIBIA OR SHIN BONE --- The larger bone in the lower leg (refer to page 9).
- K --- FIBULA --- The outer and smaller of the two bones of the lower leg (refer to page 9).

**(MUSCLES)**

- A --- STERNOCLEIDOMASTOID --- A muscle which rotates and flexes the head (refer to page 5).
- B --- TRAPEZIUS --- A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- C --- DELTOID --- A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- D --- MAMMARY GLANDS --- Also known as the mammae, the breasts, are accessory glands of the generative system. They exist in the male as well as the female, but in the former only in rudimentary state. In the female they are two rounded lobes of tissue situated on the front and sides of the chest; each extends from the second rib above to the sixth rib below, and from the side of the sternum to near the mid-axillary line. Their weight and dimensions differ at different periods of life and in different individuals. Before puberty they are of small size, but enlarge as the generative organs become more completely developed. The left mamma is generally a little larger than the right. The deep surface of each is nearly circular, flattened or slightly concave, and has its long diameter directed upward toward the armpit. The surface of the mamma is convex and presents just below the center a small cone shaped prominence, the papilla or nipple.
- E --- LATISSIMUS DORSI --- A muscle arising from the lower six thoracic vertebrae, lumbar vertebrae,

sacrum, ilium and lower ribs, inserting into the humerus, its action being to draw the arm downward and backward and to rotate it.

- F --- SERRATUS MAGNUS --- A muscle which brings the scapula forward and rotates it (refer to page 5).
- G --- EXTERNAL OBLIQUE --- A muscle which compresses the abdomen (refer to page 5).
- H --- GLUTEUS MEDIUS --- A muscle which rotates, abducts and extends the thigh (refer to page 5).
- I --- GLUTEUS MAXIMUS --- A muscle which extends, abducts and rotates the thigh outward (refer to page 8).
- J --- TENSOR FASCIAE LATAE --- A muscle which tenses the thigh (refer to page 5).
- K --- ILIOTIBIAL BAND --- A ligamentous band on the side of the thigh which strengthens the thigh and leg (refer to page 8).
- L --- BICEPS FEMORIS --- A muscle which flexes and rotates the knee outward (refer to page 8).
- M --- SARTORIUS --- A muscle which flexes the hip and knee and rotates the leg (refer to page 5).
- N --- PERONEUS LONGUS --- A muscle which extends, abducts and everts the foot (refer to page 5).
- O --- TIBIALIS ANTERIOR --- A muscle which elevates the inner border of the foot (refer to page 5).
- P --- TENDON OF ACHILLES --- A common tendon through which the gastrocnemius and soleus muscles insert on the os calcis or heel bone (refer to page 15).



## FULL FIGURE OF THE MALE SKELETON (BACK VIEW)

A — CLAVICLE OR COLLARBONE — Joins the breastbone in front and scapula in back (refer to pages 3, 6, 13, 23 and 57).

B — ACROMION PROCESS OF THE SCAPULA — The summit of the shoulder (refer to pages 3 and 13).

C — SCAPULA — The shoulder blade, a triangular bone behind the shoulder (refer to pages 1, 6, 13 and 57).

D — HUMERUS — The long bone of the upper arm (refer to pages 1, 3, 4, 6 and 13).

E — RADIUS — The shorter bone of the forearm (refer to pages 1, 4, 7 and 57).

F — PELVIS — The bony ring which supports the spinal column and rests upon the lower limbs (refer to pages 1, 3 and 10).

G — SACRUM — A triangular bone which forms the back part of the pelvis (refer to pages 1 and 12).

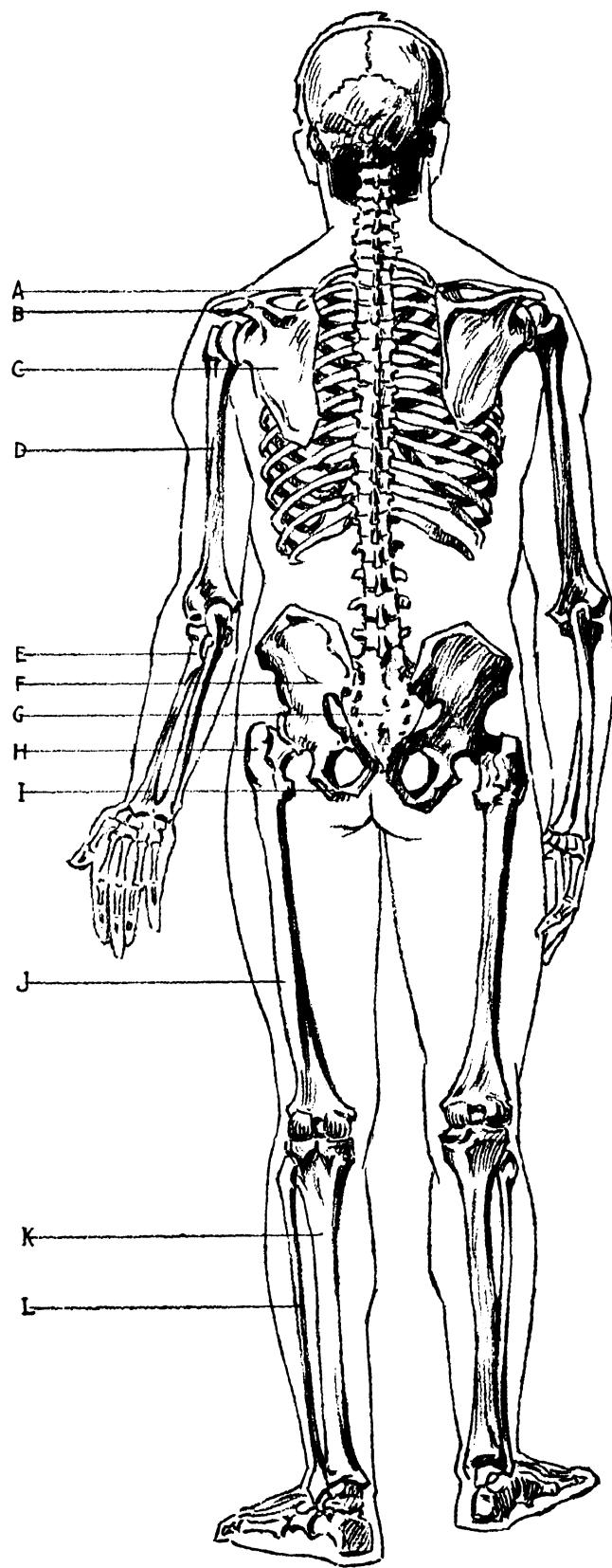
H — TROCHANTER OF FEMUR — An expanded portion of the femur bone (refer to pages 1, 8 and 9).

I — PUBIS — The front and lowermost part of the pelvis (refer to page 1).

J — FEMUR — The thigh bone, situated between the pelvis and the knee (refer to pages 8 and 9).

K — TIBIA — The shin bone, the larger bone of the lower leg (refer to pages 8 and 9).

L — FIBULA — The bone of the lower leg placed parallel with the tibia (refer to pages 8 and 9).



## BONES OF THE TRUNK AND NECK (BACK VIEW)

A — **CERVICAL VERTEBRAE** — The seven bones which form the neck and support the skull. The first cervical bone is called the atlas because it supports the head; it is smaller in size than the other vertebrae so that it prevents any interference with the movements of the skull. The second cervical bone or vertebra is called the axis, because it forms a pivot upon which the first vertebra, carrying the head, rotates. The other five are simply called cervicals, each having its own characteristic structure.

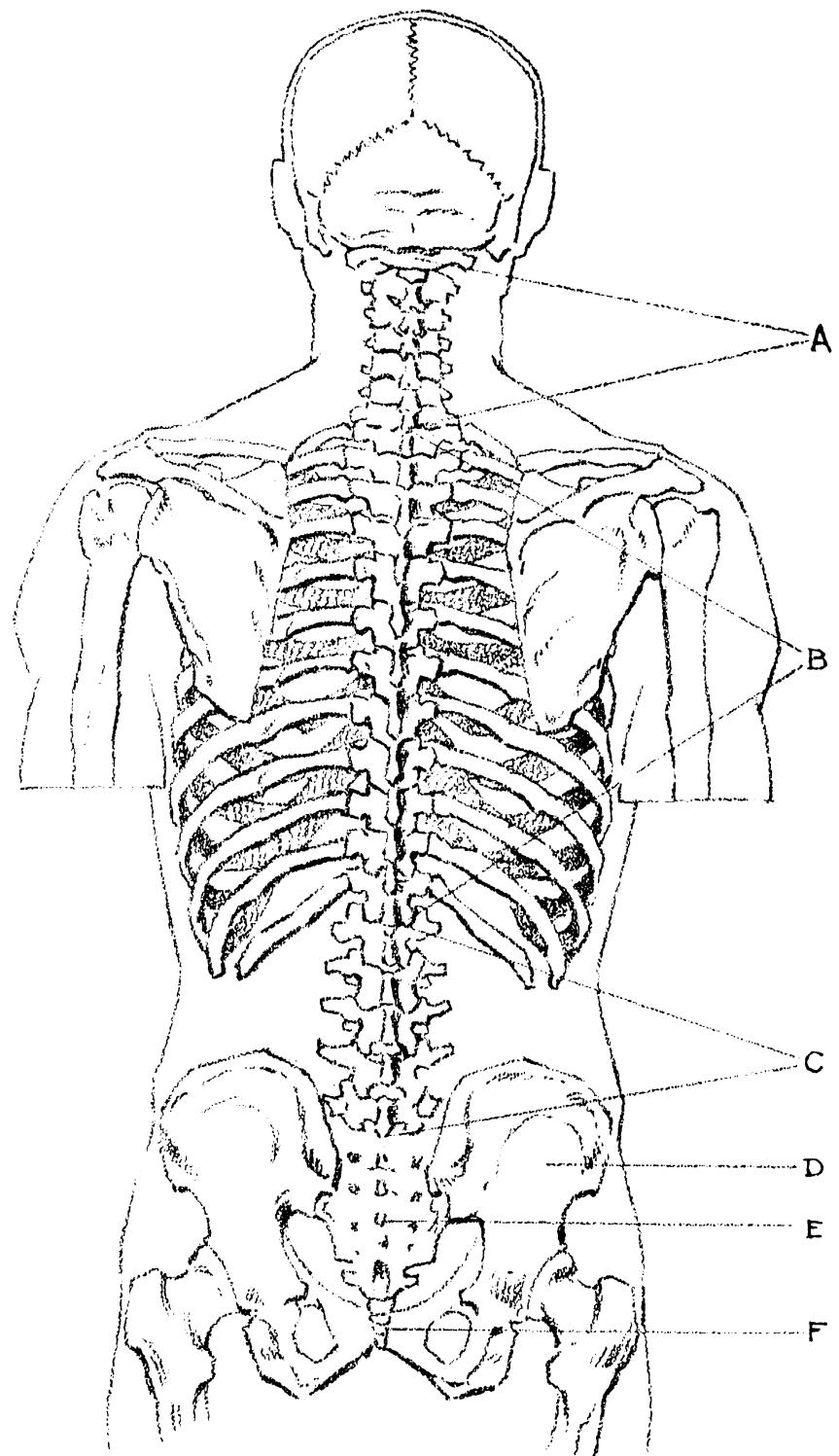
B — **THORACIC VERTEBRAE** — The twelve bones which form the trunk and serve for attachment of the ribs. These bones are slightly larger than those of the neck and increase in size from above downward. The thoracic vertebrae are heart-shaped and have grooves on each side for the express purpose of joining with the ribs.

C — **LUMBAR VERTEBRAE** — The five bones which form the lower back and serve as attachment to the pelvis. These are the largest bones in the movable part of the spinal column and can be distinguished by their extra thickness in front and extra width from side to side (this extra thickness and width achieving greater strength).

D — **PELVIS** — A bony ring which rests upon the lower limbs and supports the vertebral column (refer to page 3).

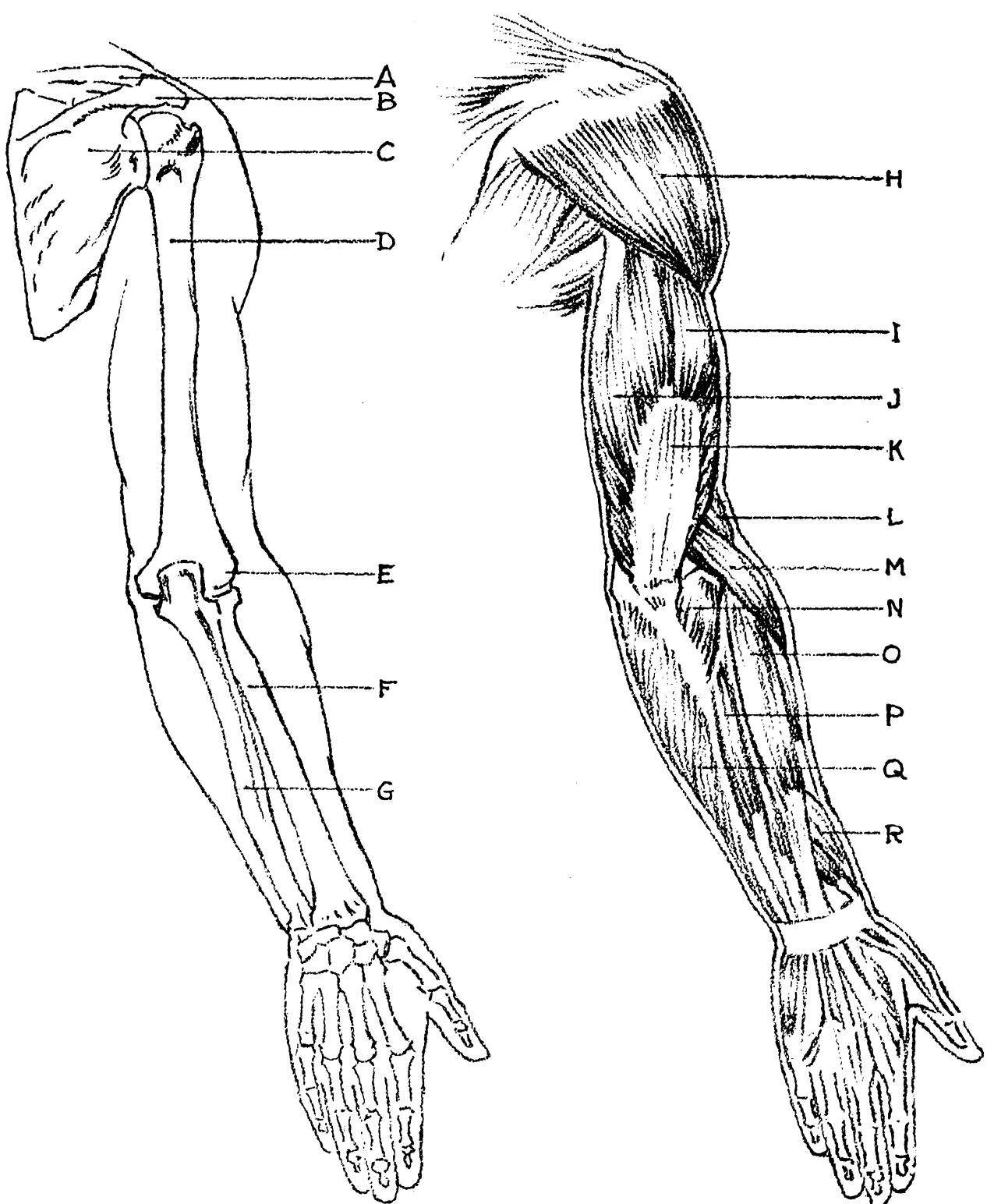
E — **SACRUM** — Forms the back of the pelvis (refer to page 1). The sacrum in early life consists of five separate bones which unite in the adult stage. It is a triangular bone in the lower part of the spinal column which is like a wedge behind and between the two hip bones.

F — **COCCYX** — A triangular group of four or five bones which become as one in the adult and which are located at the very lowest end of the spine. The coccyx is located just beneath the sacrum and like the sacrum unites as age advances, sometimes not being completely joined until after the age of 30.



## BONES AND MUSCLES OF THE ARM (BACK VIEW)

- A — CLAVICLE — The collarbone, back view (refer to pages 3, 6, 23 and 57).
- B — ACROMION PROCESS — The summit of the shoulder shown as it joins the clavicle or collarbone (refer to page 3).
- C — SCAPULA — The shoulder blade shown in back view.
- D — HUMERUS — The bone of the upper arm (refer to pages 3, 4 and 6).
- E — EXTERNAL CONDYLE OF THE HUMERUS — An expanded part of the humerus to which the extensor muscles of the hand are attached.
- F — RADIUS — The smaller bone of the forearm (refer to page 4).
- G — Ulna — The larger bone of the forearm (refer to page 4).
- H — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- I — TRICEPS BRACHII — Outer head originating in the humerus, inserting into the ulna, its action being to extend the forearm.
- J — TRICEPS BRACHII — Long head originating in the scapula, inserting into the ulna, its action being to extend the arm and forearm.
- K — TRICEPS TENDON — A tendon through which the triceps brachii muscle inserts into the olecranon process of the ulna (see page 4).
- L — BRACHIORADIALIS — A muscle originating in the humerus, inserting into the lower end of the radius, its action being to supinate the hand and flex the forearm.
- M — EXTENSOR CARPI RADIALIS LONGIOR — A muscle originating in the external condyle of the humerus, inserting into the base of the index finger, its action being to extend the wrist.
- N — ANconeus — A muscle which extends the forearm (refer to page 7).
- O — EXTENSOR COMMUNIS DIGITORUM — A muscle which extends the fingers (refer to page 7).
- P — EXTENSOR CARPI ULNARIS — A muscle originating in the external condyle of the humerus, inserting into the hand, its action being to extend and abduct the wrist.
- Q — FLEXOR CARPI ULNARIS — A muscle originating in the humerus and the ulna, inserting into the hand, its action being to flex and adduct the wrist.
- R — EXTENSORS OF THE THUMB — The action of these muscles is to extend the thumb (refer to page 7).



## BONES AND MUSCLES OF THE THIGH AND LEG

## (BACK VIEW)

A — **TROCHANTER OF FEMUR** — An extended part of the femur bone (refer to page 8).

B — **FEMUR** — Back view (refer to page 9).

C — **TIBIA** — Back view (refer to page 9).

D — **FIBULA** — Back view (refer to page 9).

E — **GLUTEUS MAXIMUS** — A muscle which extends, abducts and rotates the thigh outward (refer to page 8).

F — **ADUCTOR MAGNUS** — A muscle originating in the pubis and ischium, inserting into the lower half of the femur, its action being to adduct and evert the thigh.

G — **GRACILIS** — A muscle which flexes and adducts the leg and thigh (refer to page 5).

H — **SEMIMEMBRANOSUS** — A muscle which flexes the leg and rotates it inward (refer to page 8).

I — **SEMITENDINOSUS** — A muscle originating in the ischium, inserting into the upper, inner surface of the tibia, its action being to flex the leg on the thigh.

J — **VASTUS LATERALIS** — A muscle which extends the knee (refer to page 8).

K — **BICEPS FEMORIS** — A muscle which flexes and rotates the knee outward (refer to page 8).

L — **VASTUS INTERMEDIUS** — A muscle which extends the leg (refer to page 8).

M — **SEMIMEMBRANOSUS** — A muscle which flexes the leg and rotates it inward (refer to page 8).

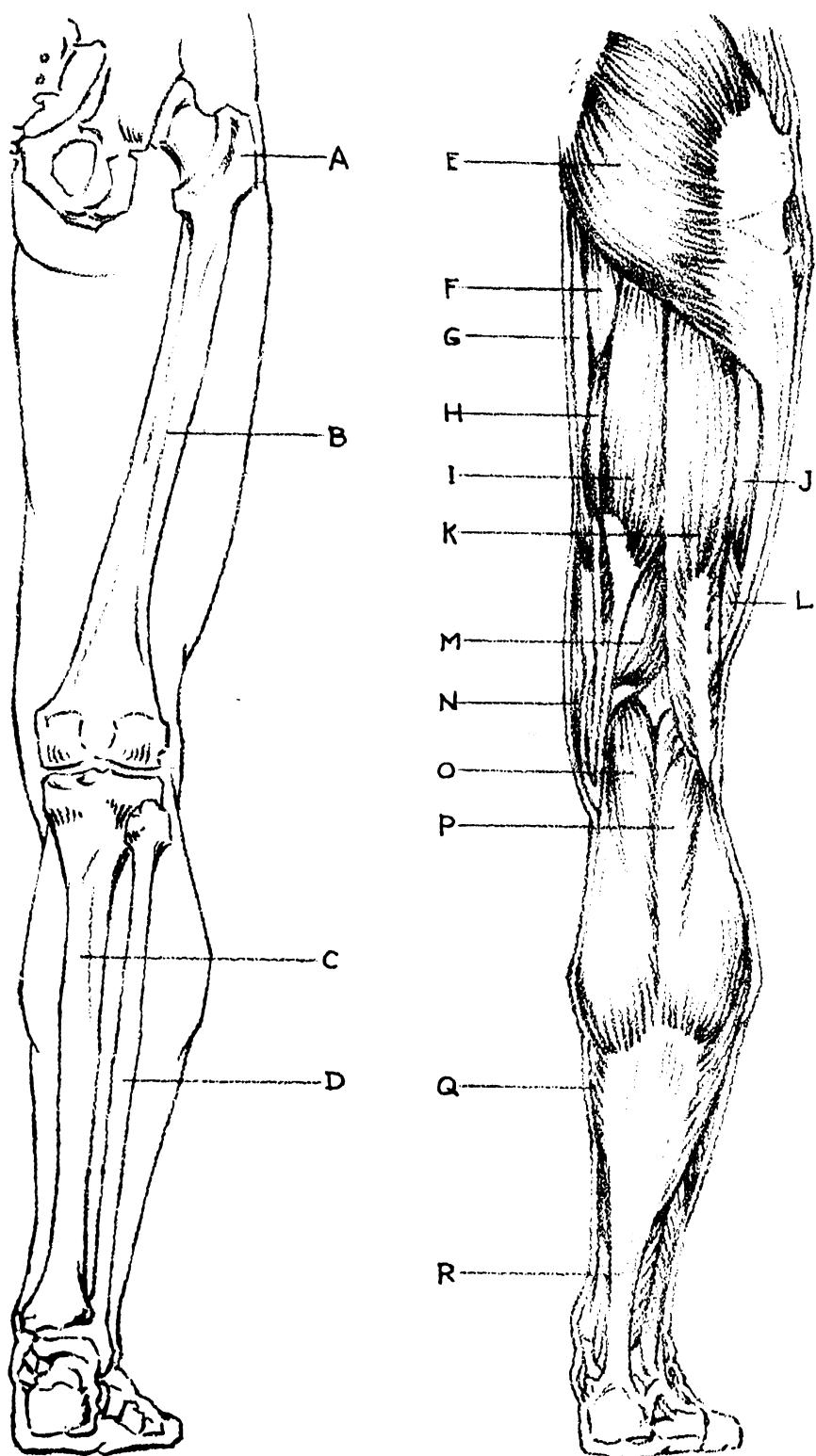
N — **SARTORIUS** — A muscle which flexes the hip and knee and rotates the leg (refer to page 5).

O — **GASTROCNEMIUS** — The inner head originating in the condyle of the femur, inserting into the os calcis (heel bone) by the achilles tendon, its action being to extend the foot (see page 57).

P — **GASTROCNEMIUS** — The outer head originating in the condyle of the femur, inserting into the os calcis (heel bone) by the achilles tendon, its action being to extend the foot and flex the leg (see page 57).

Q — **SOLEUS** — A muscle which extends the foot and rotates it inward (refer to page 6).

R — **TENDON OF ACHILLES** — A common tendon through which the gastrocnemius and soleus muscles insert on the os calcis or heel bone (refer to page 15).



## BONES AND MUSCLES OF THE FEMALE FULL FIGURE—(BACK VIEW)

## (BONES)

- A — CLAVICLE OR COLLARBONE — Joins the breastbone in front and scapula in back (refer to pages 3, 6, 13, 23 and 57).
- B — ACROMION PROCESS OF THE SCAPULA — The summit of the shoulder (refer to page 3).
- C — SCAPULA OR SHOULDERBLADE — A triangular bone behind the shoulder (refer to pages 1, 6, 13 and 57).
- D — HUMERUS — The long bone of the upper arm (refer to pages 3, 4 and 6).
- E — ULNA — The longer bone of the forearm (refer to pages 4 and 57).
- F — RADIUS — The shorter bone of the forearm (refer to pages 4 and 57).

G — PELVIS — The bony ring which supports the spinal column and rests upon the lower limbs (refer to page 3).

H — SACRUM — A triangular bone which forms the back part of the pelvis (refer to page 12).

I — TROCHANTER OF THE FEMUR — An expanded portion of the femur bone (refer to pages 8 and 9).

J — FEMUR OR THIGH BONE — Situated between the pelvis and the knee (refer to pages 8 and 9).

K — TIBIA OR SHIN BONE — The larger bone of the lower leg (refer to pages 8 and 9).

L — FIBULA — The outer and smaller of the two bones of the lower leg (refer to pages 8 and 9).

## (MUSCLES)

- A — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- B — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- C — INFRASPINATUS — A muscle originating in the scapula, inserting into the humerus, its action being to rotate the arm laterally.
- D — TERES MAJOR — A muscle originating in the scapula, inserting into the humerus, its action being to adduct, extend and rotate the arm medially.
- E — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to page 13).
- F — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

G — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).

H — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).

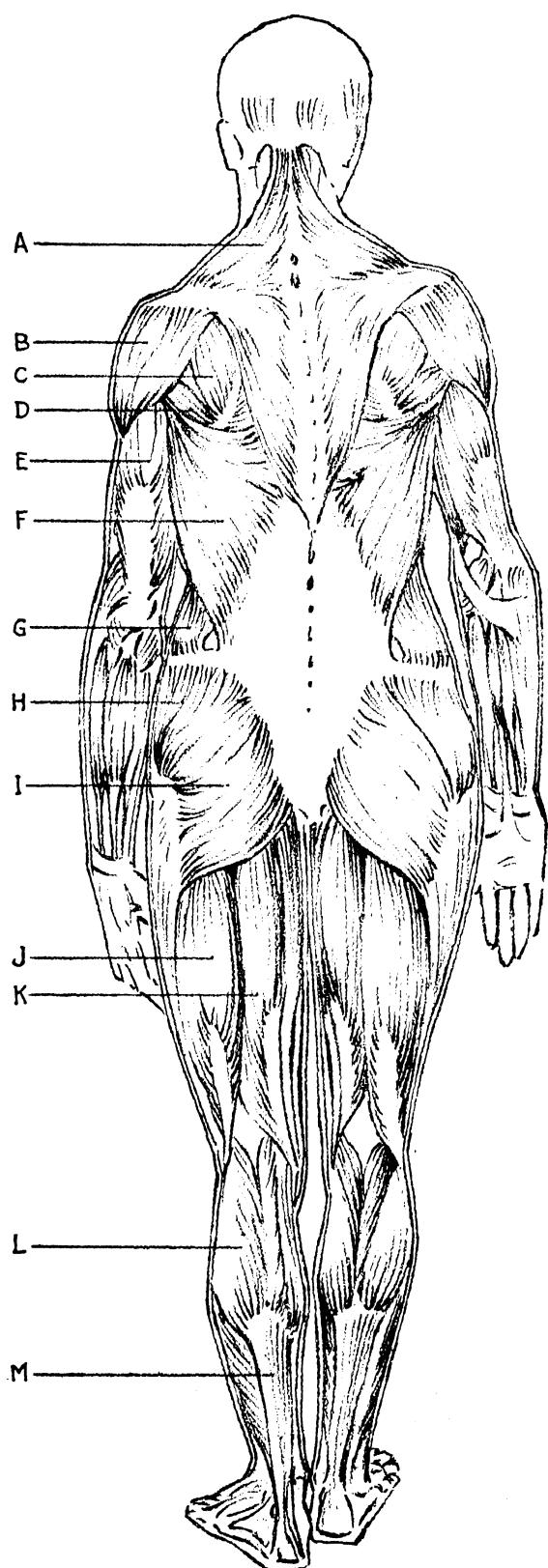
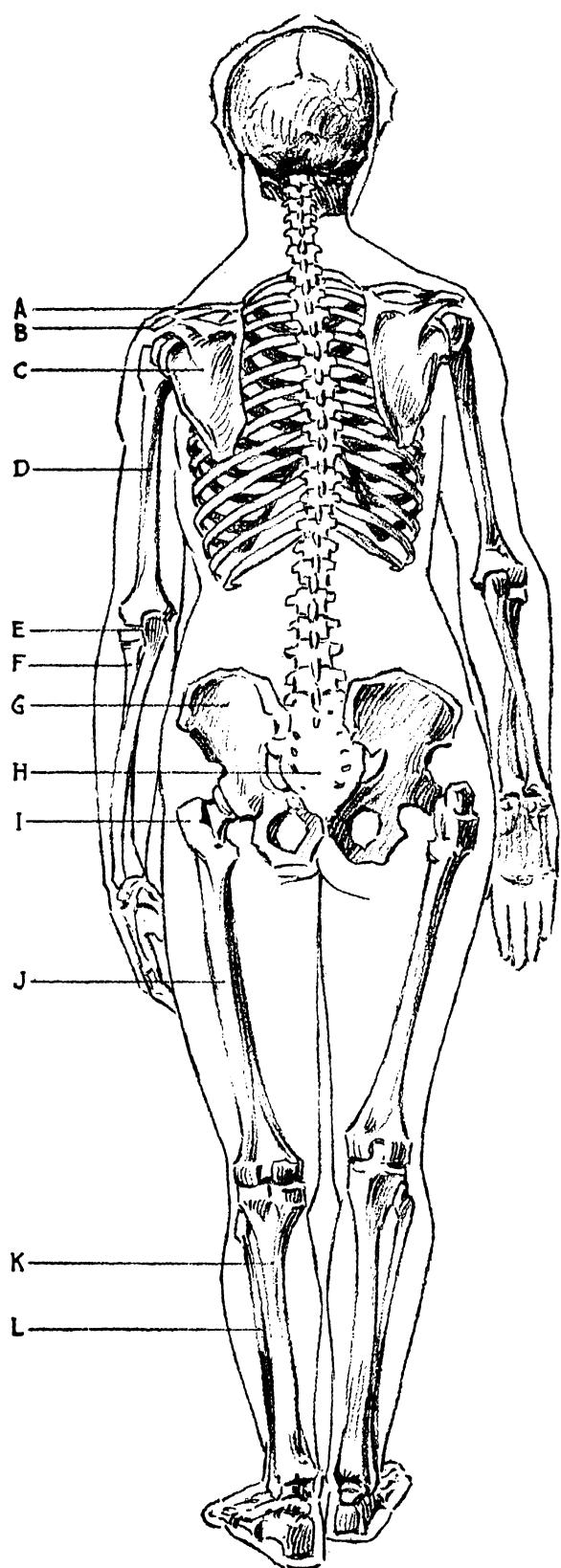
I — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh outward (refer to page 8).

J — BICEPS FEMORIS — A muscle which flexes and rotates the knee outward (refer to page 8).

K — SEMITENDINOSUS — A muscle which flexes the leg on the thigh.

L — GASTROCNEMIUS — A muscle which extends the foot and flexes the leg (refer to page 6).

M — TENDON OF ACHILLES — A common tendon through which the gastrocnemius and soleus muscles insert on the os calcis or heel bone.



## MUSCLES OF THE MALE FULL FIGURE—(FRONT VIEW)

A — **STERNOCLEIDOMASTOID** — A muscle which rotates and flexes the head (refer to page 5).

B — **TRAPEZIUS** — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

C — **DELTOID** — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

D — **PECTORALIS MAJOR** — A muscle originating in the clavicle, sternum and first six ribs, inserting into the humerus, its action being to adduct, flex and rotate the arm medially.

E — **BICEPS BRACHII** — A muscle which flexes, supinates and adducts the arm (refer to page 5).

F — **SERRATUS MAGNUS** — A muscle which brings the scapula forward and rotates it (refer to page 5).

G — **BRACHIALIS ANTICUS** — A muscle which flexes the forearm (refer to page 5).

H — **RECTUS ABDOMINIS** — A muscle which compresses and flexes the abdomen (refer to page 5).

I — **BRACHIORADIALIS** — A muscle which supinates the hand and flexes the forearm (refer to page 13).

J — **EXTENSOR CARPI RADIALIS LONGIOR** — A muscle which extends and abducts the wrist (refer to page 5).

K — **FLEXOR CARPI RADIALIS** — A muscle originating in the internal condyle of the humerus, inserting into the index finger, its action being to flex and abduct the wrist.

L — **EXTENSOR CARPI RADIALIS BREVIOR** — A muscle originating in the external condyle of the humerus, inserting into the base of the third metacarpal bone, its action being to extend and abduct the wrist.

M — **TENSOR FASCIAE LATAE** — A muscle which tenses the thigh (refer to page 5).

N — **SARTORIUS** — A muscle which flexes the hip and knee and rotates the leg (refer to page 5).

O — **RECTUS FEMORIS** — A muscle which extends the leg (refer to page 5).

P — **BAND OF RICHTER** — A fibrous band that strengthens the thigh (refer to page 45).

Q — **VASTUS MEDIALIS** — A muscle which extends the leg (refer to page 6).

R — **PATELLA** — A triangular bone situated in front of the knee joint.

S — **TIBIA OR SHIN BONE** — The larger bone of the lower leg.

T — **TIBIALIS ANTICUS** — A muscle which elevates the inner border of the foot and flexes the ankle (refer to page 6).

U — **PERONEUS LONGUS** — A muscle which extends, abducts and everts the foot (refer to page 6).

V — **EXTENSOR LONGUS DIGITORUM** — A muscle which extends the lesser toes (refer to page 8).

W — **SOLEUS** — A muscle which extends the foot and adducts it (refer to page 6).

●

a — **PLATYSMA** — A muscle originating in the clavicle, inserting into the lower jaw-bone, its action being to wrinkle the skin and depress the mouth and lower lip.

b — **EXTERNAL OBLIQUE** — A muscle which compresses the abdomen (refer to page 5).

c — **FLEXOR CARPI RADIALIS** — A muscle originating in the internal condyle of the humerus, inserting into the index finger, its action being to flex and abduct the wrist.

d — **PALMARIS LONGUS** — A muscle originating in the internal condyle of the humerus, inserting into the palm, its action being to stretch the palm, flex the wrist and forearm.

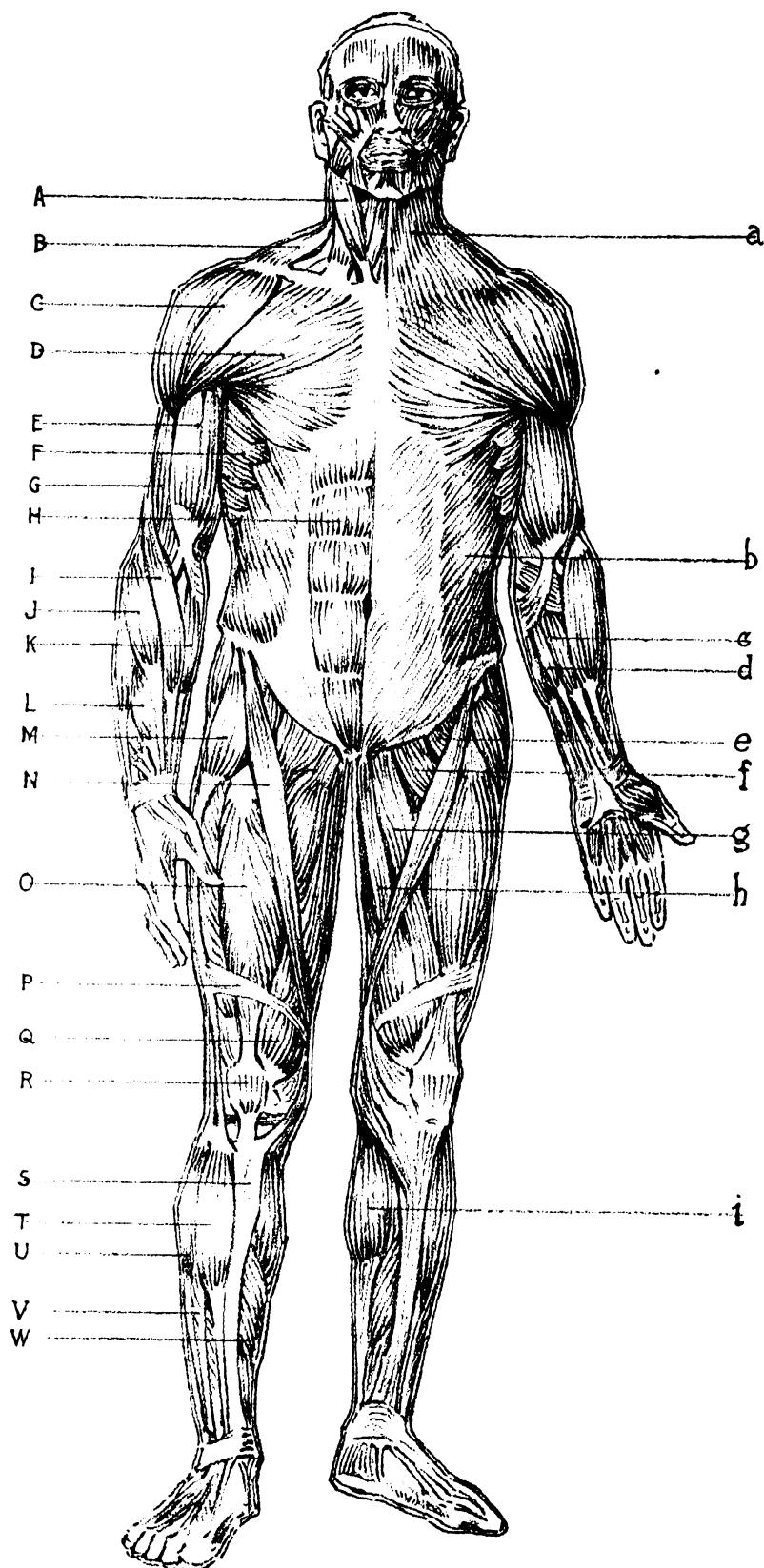
e — **PSOAS ILIACUS** — Two muscles originating in the last dorsal and lumbar vertebrae, inserting into the lesser trochanter of the femur, their action being to flex and rotate the thigh outward.

f — **PECTINEUS** — A muscle originating from the pubis, inserting just below the lesser trochanter of the femur, its action being to flex, adduct and rotate the thigh outward.

g — **ADDOCTOR LONGUS** — A muscle which rotates, adducts and flexes the thigh (refer to page 5).

h — **GRACILIS** — A muscle which flexes and adducts the leg and thigh (refer to page 5).

i — **GASTROCNEMIUS** — A muscle which extends the foot and flexes the leg (refer to page 14).



## MUSCLES OF THE FACE (FRONT AND SIDE VIEWS)

A — **FRONTALIS** — A muscle originating in the deep tissues of the scalp and inserting into the skin of the forehead, its function being to raise the eyebrows and wrinkle the forehead.

B — **TEMPORAL FASCIA** — A fibrous coating over the muscles of the side of the head.

C — **ORBICULARIS OCULI** — A muscle originating in the frontal bone, inserting into the skin of the eyelids, forehead, temple and cheek, its action being to close the eyelids.

D — **PROCERUS** — A muscle originating in the occipitofrontalis muscle, inserting into the cartilage of the nose, its action being to depress the inner angle of the eyebrow.

E — **NASALIS** — A muscle originating in the upper jaw bone, inserting into the skin of the nose, its action being to narrow the nostrils.

F — **LEVATOR LABII SUPERIORIS** — A muscle originating in the inferior margin of the bone surrounding the eye, inserting into the upper lip, its action being to lift and protrude the upper lip.

G — **MASSETER** — A muscle originating in the zygomatic arch, inserting into the lower jaw, its action being that of chewing.

H — **ORBICULARIS ORIS** — A muscle originating in the nose and lower jaw, inserting into the sides of the mouth, its action being to close the mouth.

I — **BUCCINATOR** — A muscle originating in the jaw bones, inserting into the orbicularis oris, its action being to compress the cheeks.

J — **TRIANGULARIS** — A muscle originating in the lower jaw, inserting into the side of the mouth, its action being to pull down the side of the mouth.

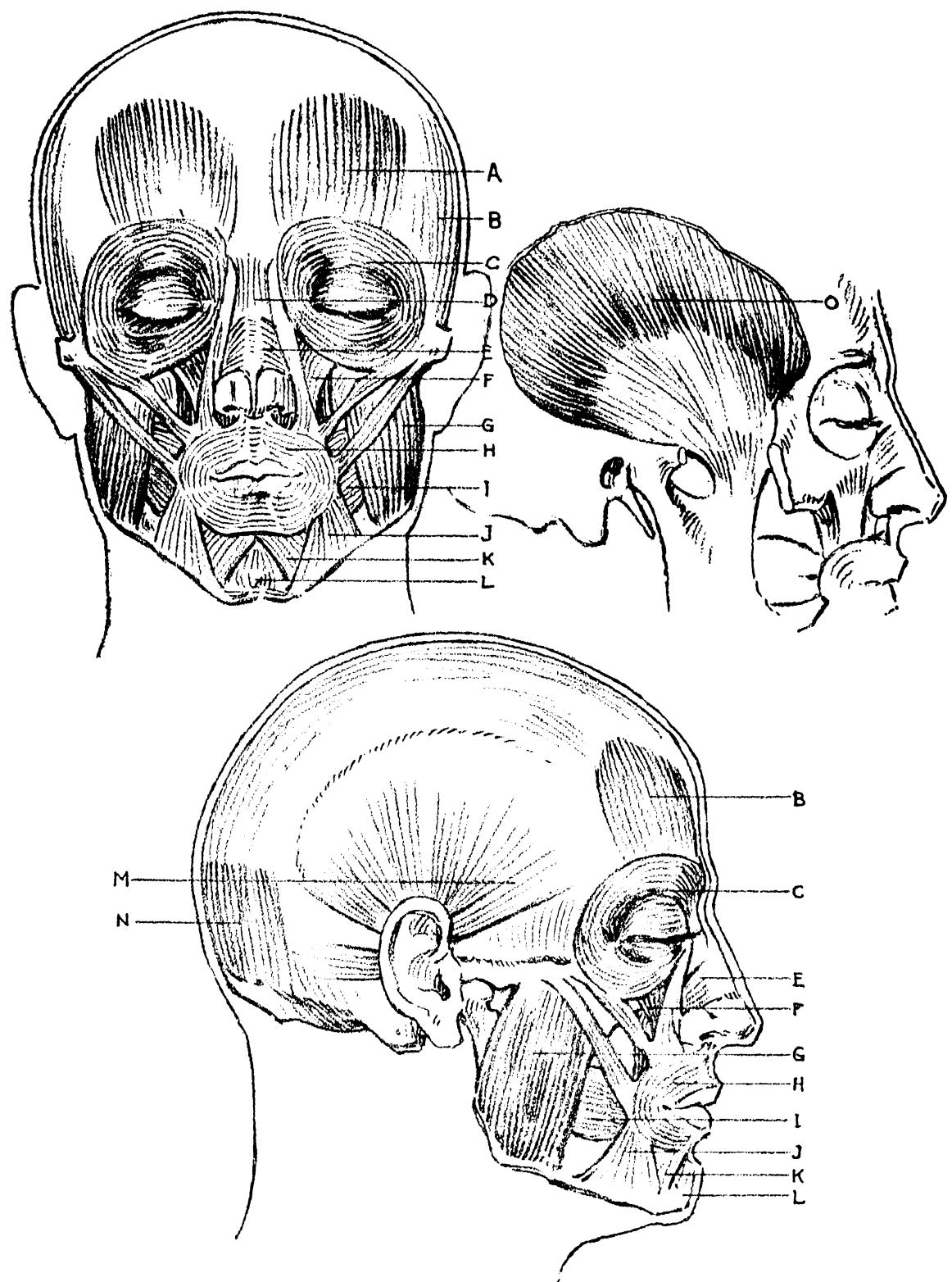
K — **DEPRESSOR LABII INFERIORIS** — A muscle originating in the lower jaw-bone, inserting in the lower lip, its action being to depress the lower lip.

L — **LEVATOR MENTI** — A muscle originating in the lower jawbone, inserting into the skin of the chin, its action being to raise the lower lip and wrinkle the chin.

M — **AURICULAR MUSCLES** — Three muscles originating in the mastoid process of the temporal bone and the occipitalis and frontalis muscles, inserting into the ear, their action being to pull back, raise and draw the ear forward.

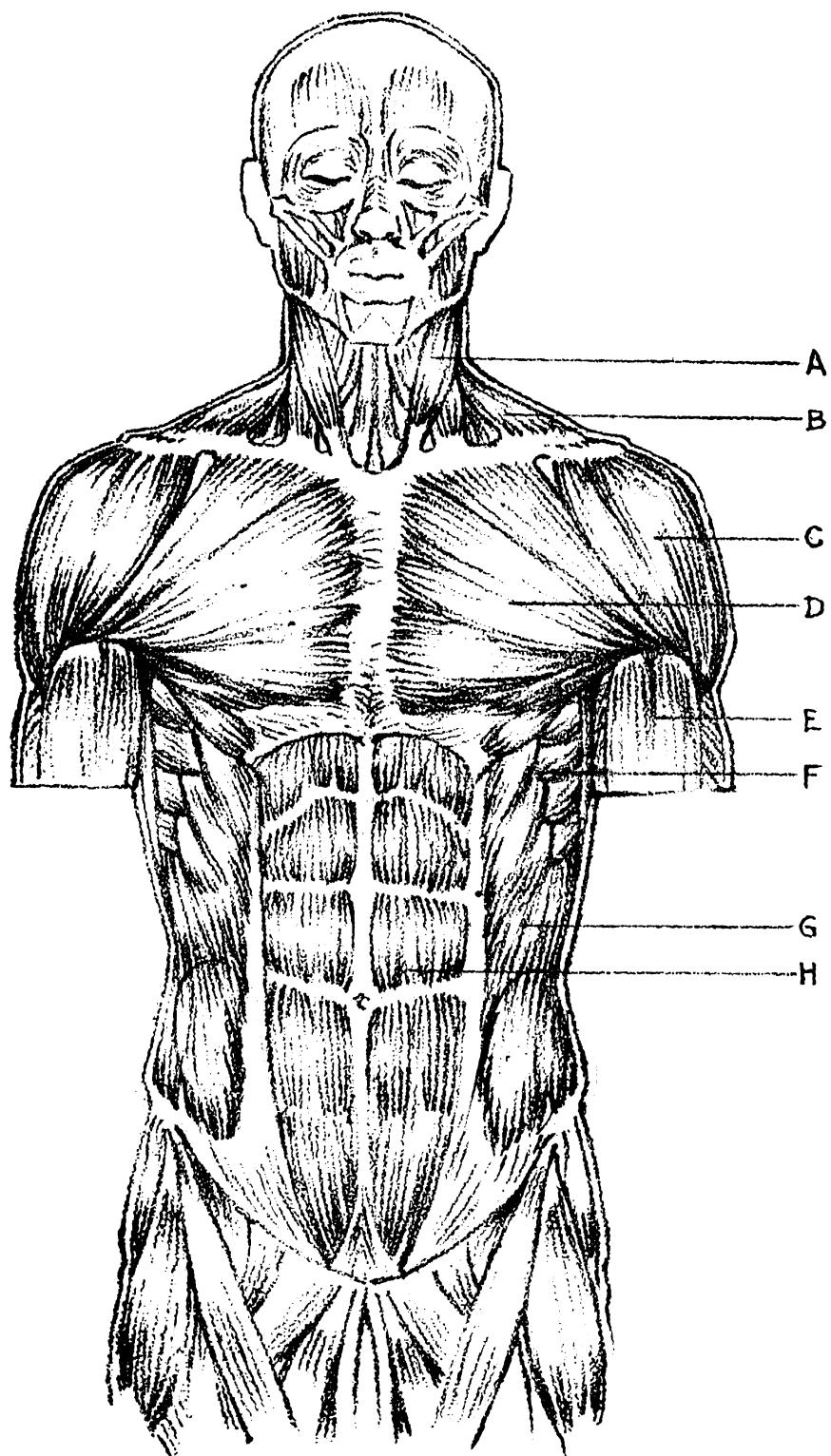
N — **OCCIPITALIS** — A muscle originating in the occipital portion of the skull, inserting into the deep portions of the scalp, its action being to draw the scalp backward.

O — **TEMPORALIS** — A muscle originating in the side of the head, inserting into the lower jaw, its action being to close the mouth and retract the jaw.



## MUSCLES OF THE TRUNK (FRONT VIEW)

- A — STERNOCLIDOMASTOID — A muscle which rotates and flexes the head (refer to page 5).
- B — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- C — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- D — PECTORALIS MAJOR — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).
- E — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).
- F — SERRATUS MAGNUS — A muscle which brings forward and rotates the scapula (refer to page 5).
- G — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).
- H — RECTUS ABDOMINIS — A muscle which flexes the body and compresses the abdomen (refer to page 5).



## DEEP MUSCLES OF THE TRUNK (FRONT VIEW)

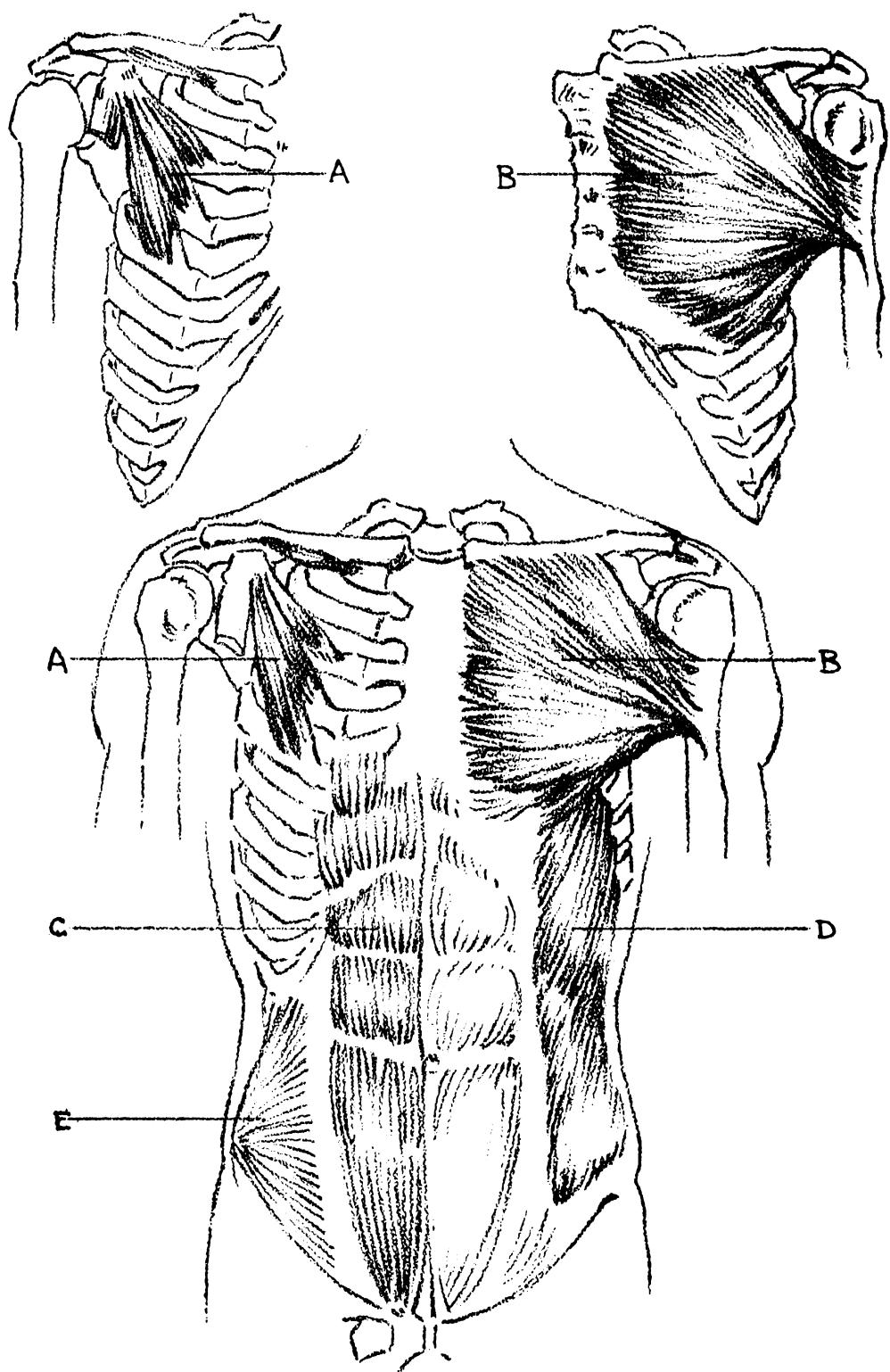
A — **PECTORALIS MINOR** — A muscle originating in the third, fourth and fifth ribs, inserting into the scapula, its action being to depress the shoulder and lower the scapula.

B — **PECTORALIS MAJOR** — A muscle which draws the arm downward and forward and aids in expanding the chest (refer to page 16).

C — **RECTUS ABDOMINIS** — A muscle which compresses the abdomen and flexes the body (refer to page 5).

D — **EXTERNAL OBLIQUE** — A muscle which compresses the abdomen (refer to page 5).

E — **TRANSVERSALIS ABDOMINIS** — A muscle originating in the top of the ilium, lumbar vertebrae and lower ribs, inserting into the pubis, its action being to compress the abdomen and flex the body.



## MUSCLES OF THE TRUNK (FRONT VIEW)

A — **STERNOCLIDOMASTOID** — A muscle which rotates and flexes the head (refer to page 5).

B — **TRAPEZIUS** — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

C — **BICEPS BRACHII** — A muscle which flexes, supinates and adducts the arm (refer to page 5).

D — **DELTOID** — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

E — **TRICEPS BRACHII** — A muscle which extends the arm and forearm (refer to pages 7 and 13).

F — **CORACOBRACHIALIS** — A muscle originating in the scapula, inserting into the middle of the humerus, its action being to flex and adduct the arm.

G — **TERES MAJOR** — A muscle which adducts, extends and rotates the arm medially (refer to page 15).

H — **PECTORALIS MAJOR** — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).

I — **LATISSIMUS DORSI** — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

J — **SERRATUS MAGNUS** — A muscle which brings the scapula forward and rotates it (refer to page 5).

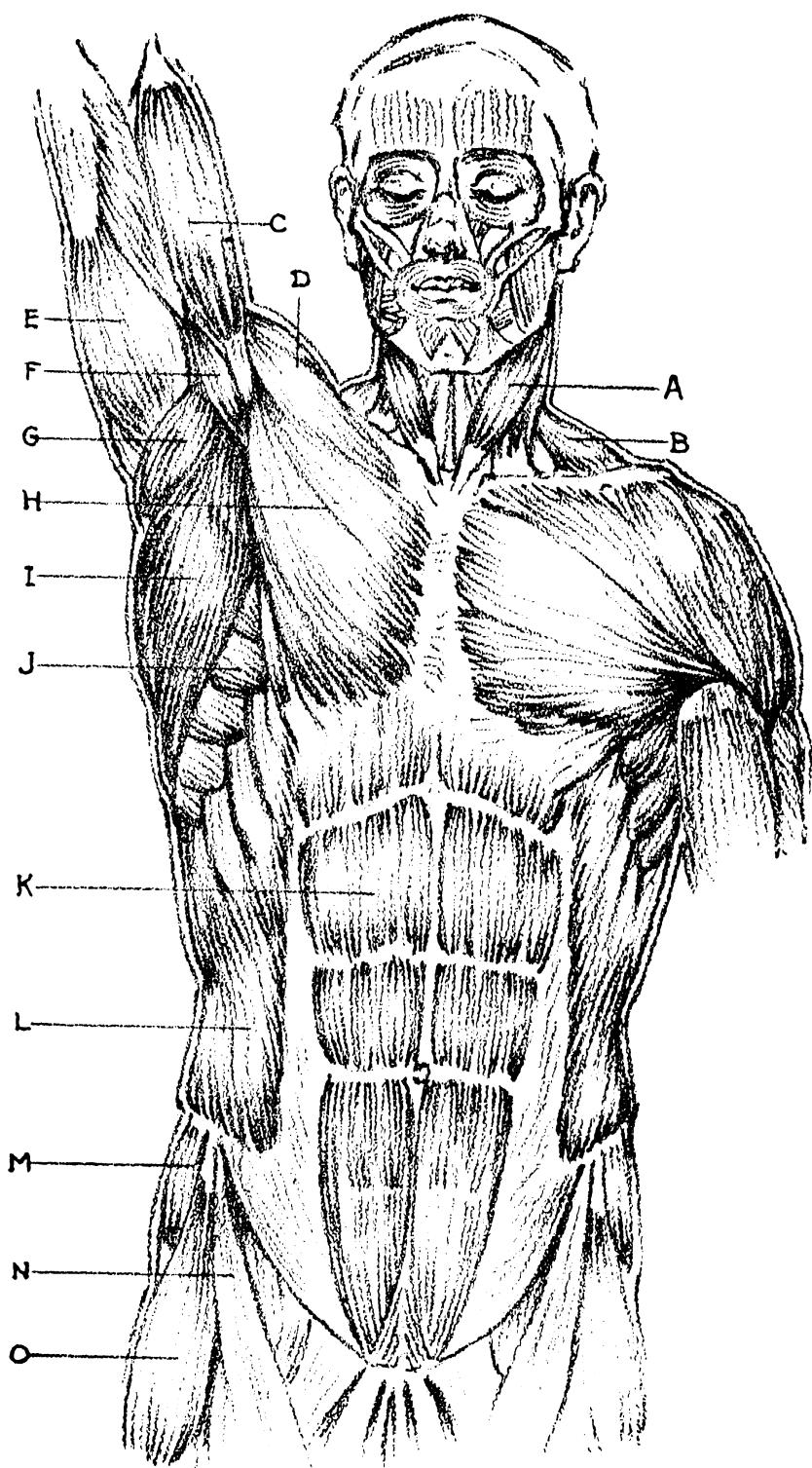
K — **RECTUS ABDOMINIS** — A muscle which compresses the abdomen and flexes the body (refer to page 5).

L — **EXTERNAL OBLIQUE** — A muscle which compresses the abdomen (refer to page 5).

M — **GLUTEUS MEDIUS** — A muscle which rotates, abducts and extends the thigh (refer to page 5).

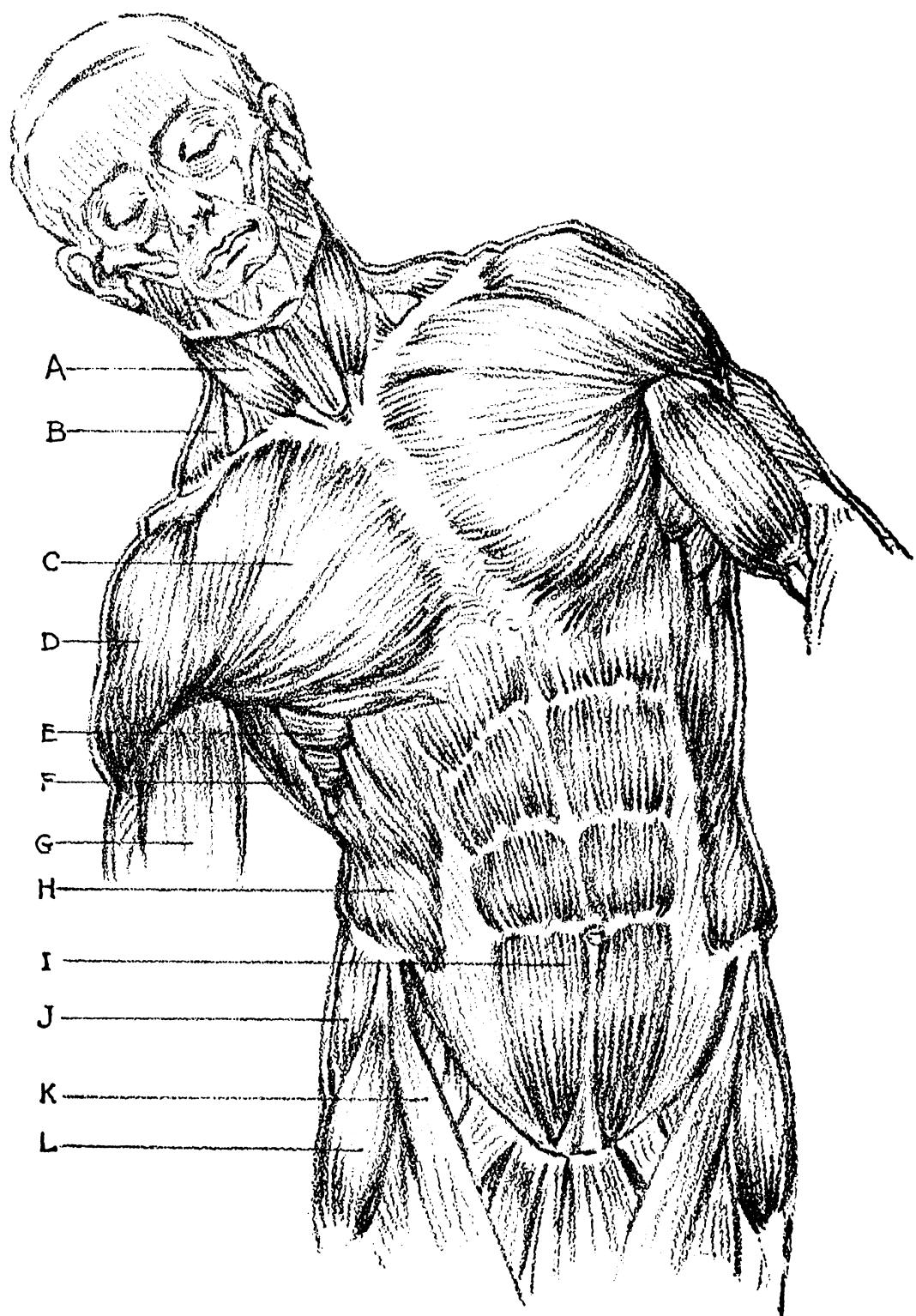
N — **SARTORIUS** — A muscle which flexes the hip and knee and rotates the leg (refer to page 5).

O — **TENSOR FASCIAE LATAE** — A muscle which tenses the thigh (refer to page 5).



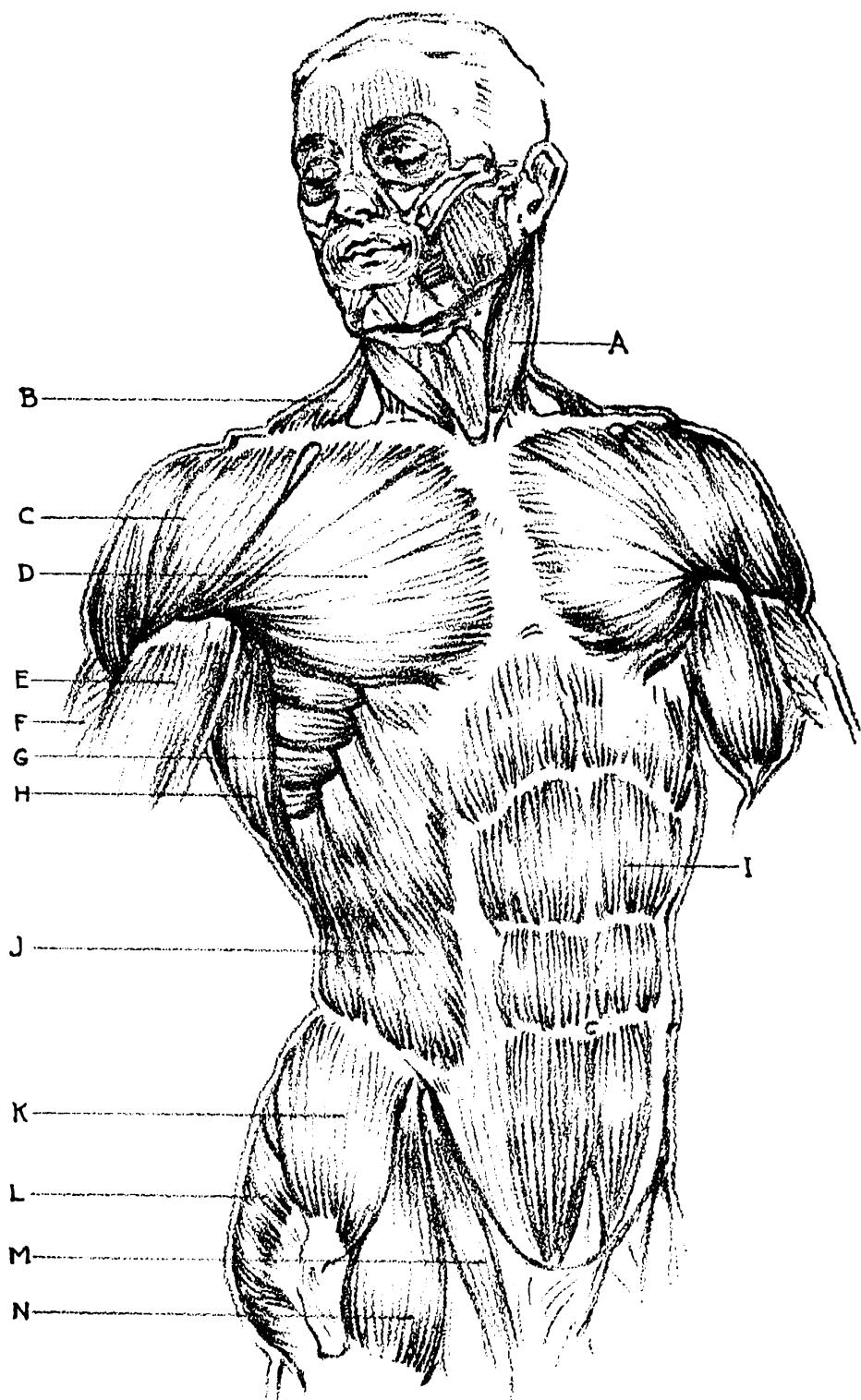
## MUSCLES OF THE TRUNK (FRONT VIEW)

- A — STERNOCLEIDOMASTOID — A muscle which rotates and flexes the head (refer to page 5).
- B — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- C — PECTORALIS MAJOR — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).
- D — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- E — SERRATUS MAGNUS — A muscle which brings the scapula forward and rotates it (refer to page 5).
- F — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).
- G — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).
- H — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).
- I — RECTUS ABDOMINIS — A muscle which compresses the abdomen and flexes the body (refer to page 5).
- J — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- K — SARTORIUS — A muscle which flexes the hip and knee and rotates the leg (refer to page 5).
- L — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).



## MUSCLES OF THE TRUNK (FRONT VIEW)

- A — STERNOCLÉIDOMASTOID — A muscle which rotates and flexes the head (refer to page 5).
- B — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- C — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- D — PECTORALIS MAJOR — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).
- E — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).
- F — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to pages 7 and 13).
- G — SERRATUS MAGNUS — A muscle which brings forward and rotates the scapula (refer to page 5).
- H — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).
- I — RECTUS ABDOMINIS — A muscle which compresses the abdomen and flexes the body (refer to page 5).
- J — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).
- K — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- L — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh outward (refer to page 8).
- M — SARTORIUS — A muscle which flexes the hip and knee and rotates the leg (refer to page 5).
- N — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).



## BONES AND MUSCLES OF THE ARM AND FOREARM

## (FRONT VIEW)

A -- CLAVICLE -- The collarbone shown from front (refer to pages 3, 6, 13 and 57).

B -- ACROMION PROCESS -- The summit of the shoulder which joins with the clavicle (refer to page 3).

C -- SCAPULA -- The shoulder blade which is situated in the upper back (front view shown) (refer to pages 6 and 57).

D -- HUMERUS -- The bone of the upper arm (refer to pages 3, 4 and 6).

E -- EXTERNAL CONDYLE OF THE HUMERUS -- An expanded part of the humerus.

F -- RADIUS -- The smaller bone of the forearm (refer to pages 4 and 57).

G -- URNA -- The larger bone of the forearm (refer to pages 4 and 57).

H -- DELTOID -- A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

I -- TRICEPS BRACHII (Outer head) -- A muscle which extends the arm and forearm (refer to page 13).

J -- BICEPS BRACHII -- A muscle which flexes, supinates and adducts the arm (refer to page 5).

K -- BRACHIALIS ANTICUS -- A muscle which flexes the forearm (refer to page 5).

L -- TRICEPS BRACHII (Inner head) -- A muscle which extends the arm and forearm (refer to pages 7 and 13).

M -- PRONATOR RADII TERES -- A muscle originating in the humerus and ulna, inserting into the radius, its action being to pronate the hand.

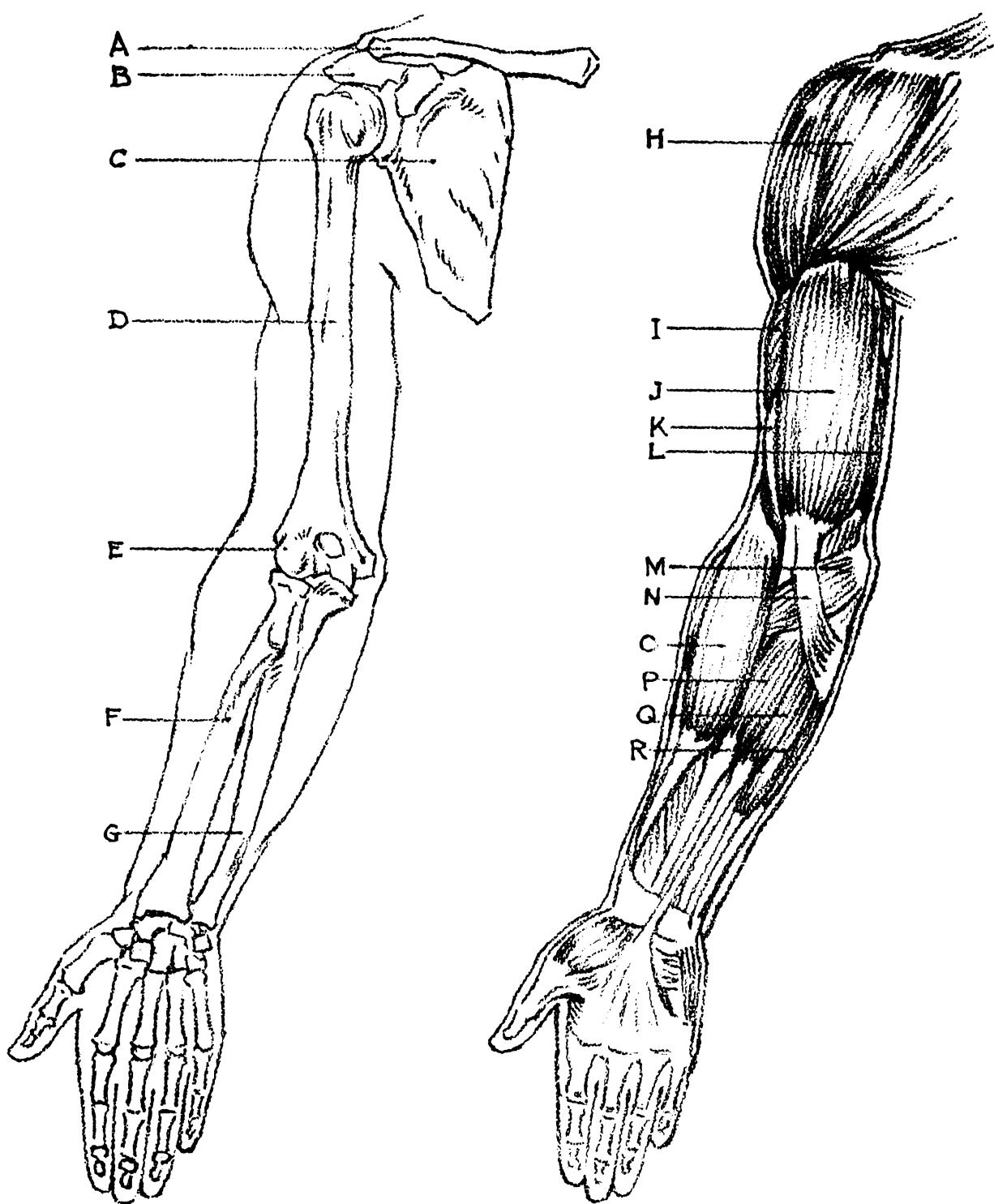
N -- BICIPITAL FASCIA -- Tendinous fibers that pass across the inner bend of the elbow and form boundaries in which the muscles are contained; they are part of the insertion of the biceps brachii muscle.

O -- BRACHIORADIALIS -- A muscle which supinates the hand (refer to page 5).

P -- FLEXOR CARPI RADIALIS -- A muscle which flexes and abducts the wrist (refer to page 16).

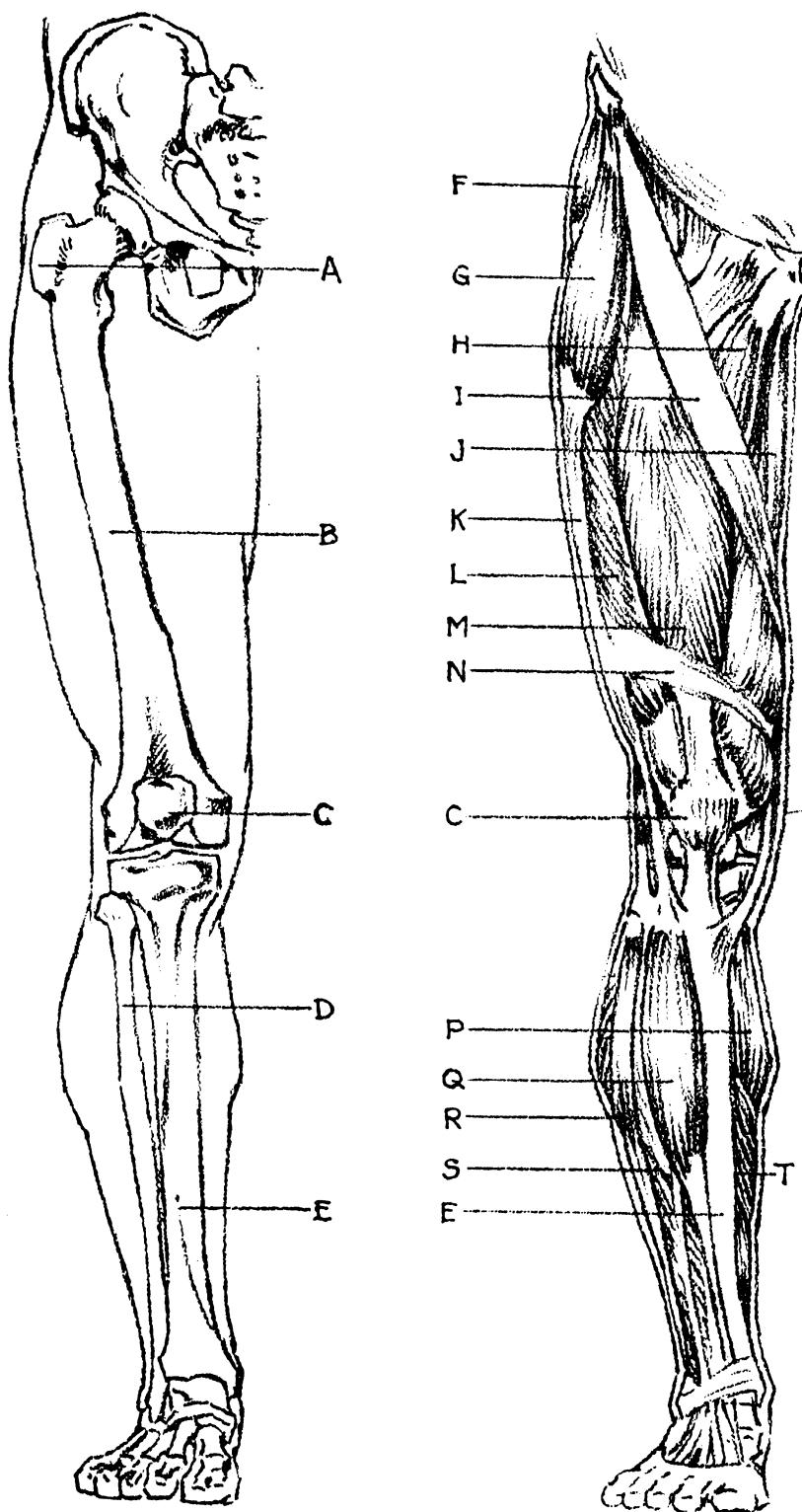
Q -- PALMARIS LONGUS -- A muscle which stretches the tissues of the palm (refer to page 16).

R -- FLEXOR CARPI ULNARIS -- A muscle which flexes and adducts the wrist (refer to page 13).



**BONES AND MUSCLES OF THE THIGH AND LEG  
(FRONT VIEW)**

- A — GREATER TROCHANter OF FEMUR** — An expanded part of the femur bone (refer to page 9).
- B — FEMUR** — Front view (refer to page 9).
- C — PATELLA** — A large bone placed in front of the knee (refer to page 9).
- D — FIBULA** — Front view (refer to page 9).
- E — TIBIA** — Front view (refer to page 9).
- F — GLUTEUS MEDIUS** — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- G — TENSOR FASCIAE LATAE** — A muscle which tenses the thigh (refer to page 5).
- H — ADDUCTOR LONGUS** — A muscle which rotates, adducts and flexes the thigh (refer to page 5).
- I — SARTORIUS** — A muscle that flexes the thigh and rotates the leg (refer to page 5).
- J — GRACILIS** — A muscle which flexes and adducts the leg and thigh (refer to page 5).
- K — Iliotibial Band** — A ligamentous band on the side of the thigh and leg that strengthens the thigh (refer to page 8).
- L — VASTUS LATERALIS** — A muscle which extends the knee (refer to page 5).
- M — RECTUS FEMORIS** — A muscle which extends the leg (refer to page 5).
- N — BAND OF RICHTER** — A fibrous band that strengthens the thigh (refer to page 45).
- O — PATELLAR LIGAMENT** — The attachment of the patella to the tibia, and the inserting ligament of the extensor group of thigh muscles (rectus femoris and vastus muscles).
- P — GASTROCNEMIUS** — A muscle which extends the foot and flexes the leg (refer to page 6).
- Q — TIBIALIS ANTICUS** — A muscle which elevates the inner border of the foot (refer to page 6).
- R — PERONEUS LONGUS** — A muscle which extends, abducts and everts the foot (refer to page 6).
- S — EXTENSOR LONGIUS DIGITORUM** — A muscle which extends the toes (refer to page 8).
- T — SOLEUS** — A muscle which extends the foot and rotates it inward (refer to page 6).



## MUSCLES OF THE SHOULDER (FRONT AND BACK VIEWS)

A — **TRAPEZIUS** — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

B — **DELTOID** — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

C — **TERES MINOR** — A muscle originating in the scapula, inserting into the humerus, its action being to abduct the humerus and rotate it outward.

D — **TERES MAJOR** — A muscle which adducts, extends and rotates the arm medially (refer to page 15).

E — **INFRASPINATUS** — A muscle which rotates the arm laterally (refer to page 15).

F — **RHOMBOIDEUS** — A muscle which pulls back (retracts) and elevates the scapula (refer to page 26).

G — **STERNOCLIDOMASTOID** — A muscle which rotates and flexes the head (refer to page 5).

H — **BICEPS BRACHII** — A muscle which flexes, supinates and adducts the arm (refer to page 5).

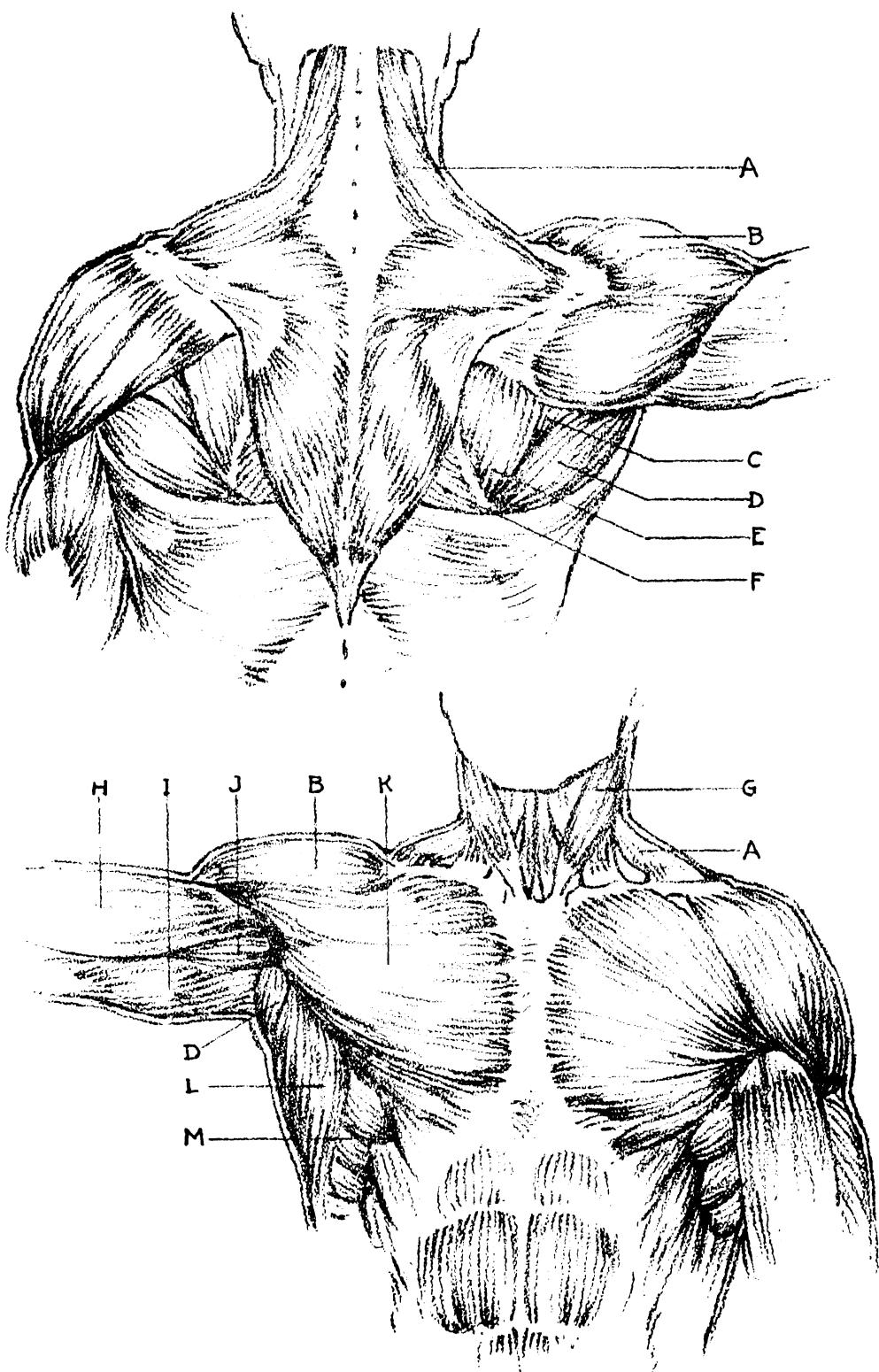
I — **TRICEPS BRACHII** — A muscle which extends the arm and forearm (refer to page 15).

J — **CORACOBRACHIALIS** — A muscle which flexes and adducts the arm (refer to page 20).

K — **PECTORALIS MAJOR** — A muscle which flexes, adducts and rotates the arm medially (refer to page 16).

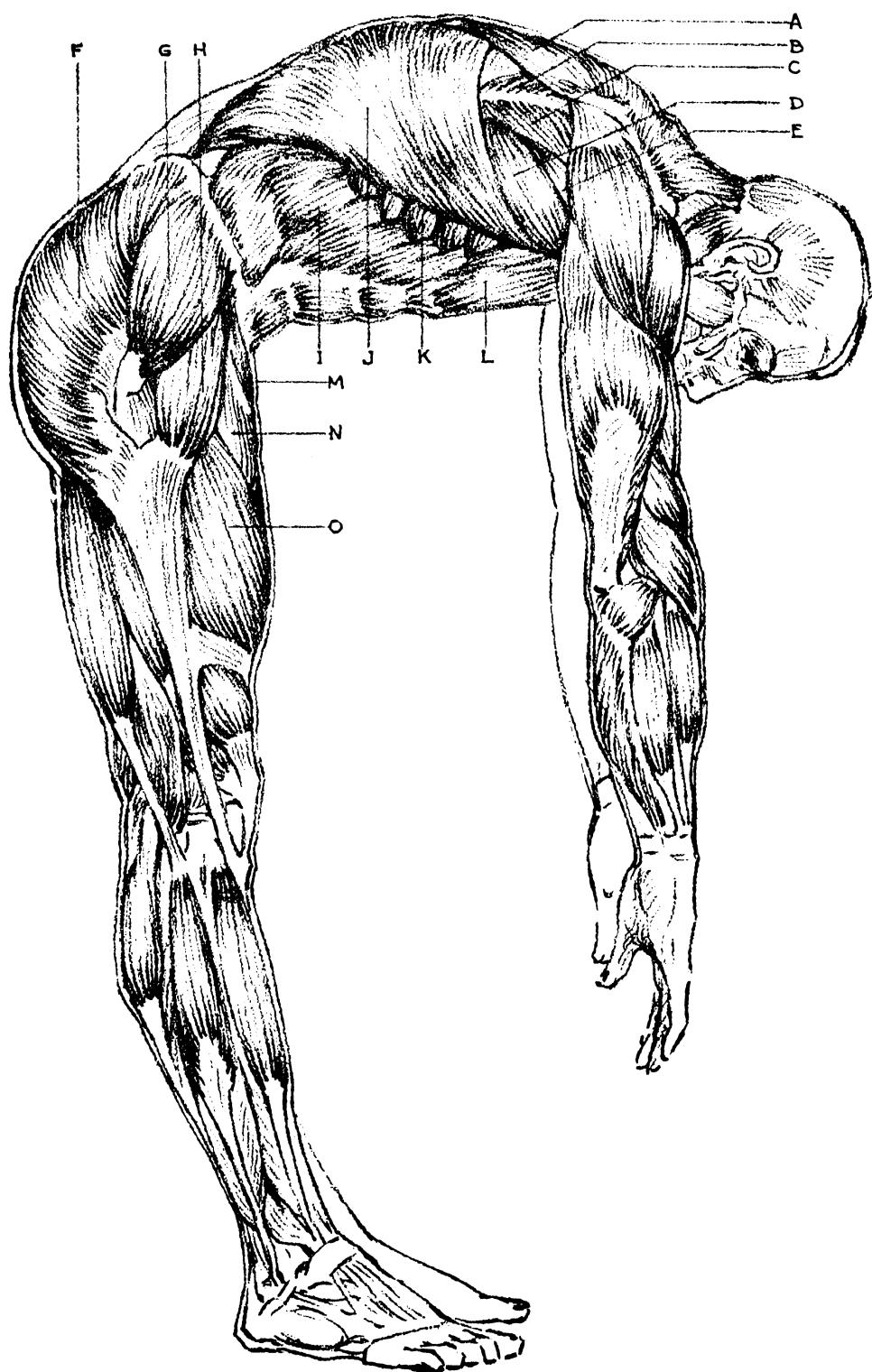
L — **LATISSIMUS DORSI** — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

M — **SERRATUS MAGNUS** — A muscle that brings forward and rotates the scapula (refer to page 5).



## MUSCLES OF THE MALE FIGURE (SIDE VIEW)

- A - TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- B - RHOMBOID MUSCLES — Two muscles originating in the seventh cervical and first five thoracic vertebrae, inserting into the scapula, their action being to pull back and elevate the scapula.
- C — INFRASPINATUS — A muscle which rotates the arm laterally (refer to page 15).
- D - TERES MAJOR — A muscle which adducts, extends and rotates the arm medially (refer to page 15).
- E — TERES MINOR — A muscle which abducts the humerus and rotates it outward (refer to page 25).
- F — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh outward (refer to page 8).
- G - GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- H - - TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).
- I — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).
- J - - LATISSIMUS DORSI — A muscle which draws the arm downward and backward (refer to page 10).
- K — SERRATUS MAGNUS — A muscle which brings the scapula forward and rotates it (refer to page 5).
- L - - PECTORALIS MAJOR — A muscle which draws the arm forward and downward (refer to page 16).
- M — SARTORIUS — A muscle which flexes the thigh and rotates the leg (refer to page 5).
- N — RECTUS FEMORIS — A muscle which extends the leg (refer to page 5).
- O — VASTUS LATERALIS — A muscle which extends the leg (refer to page 5).



## MUSCLES OF THE TRUNK (SIDE VIEW)

A — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to pages 7 and 13).

B — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

C — PECTORALIS MAJOR — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).

D — TERES MAJOR — A muscle which adducts, extends and rotates the arm medially (refer to page 15).

E — TERES MINOR — A muscle which abducts the humerus and rotates it outward (refer to page 25).

F — RECTUS ABDOMINIS — A muscle which compresses the abdomen and flexes the body (refer to page 5).

G — SERRATUS MAGNUS — A muscle which brings forward and rotates the scapula (refer to page 5).

H — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

I — INFRASPINATUS — A muscle which rotates the arm laterally (refer to page 15).

J — RHOMBOIDEUS — A muscle which pulls back and elevates the scapula (refer to page 26).

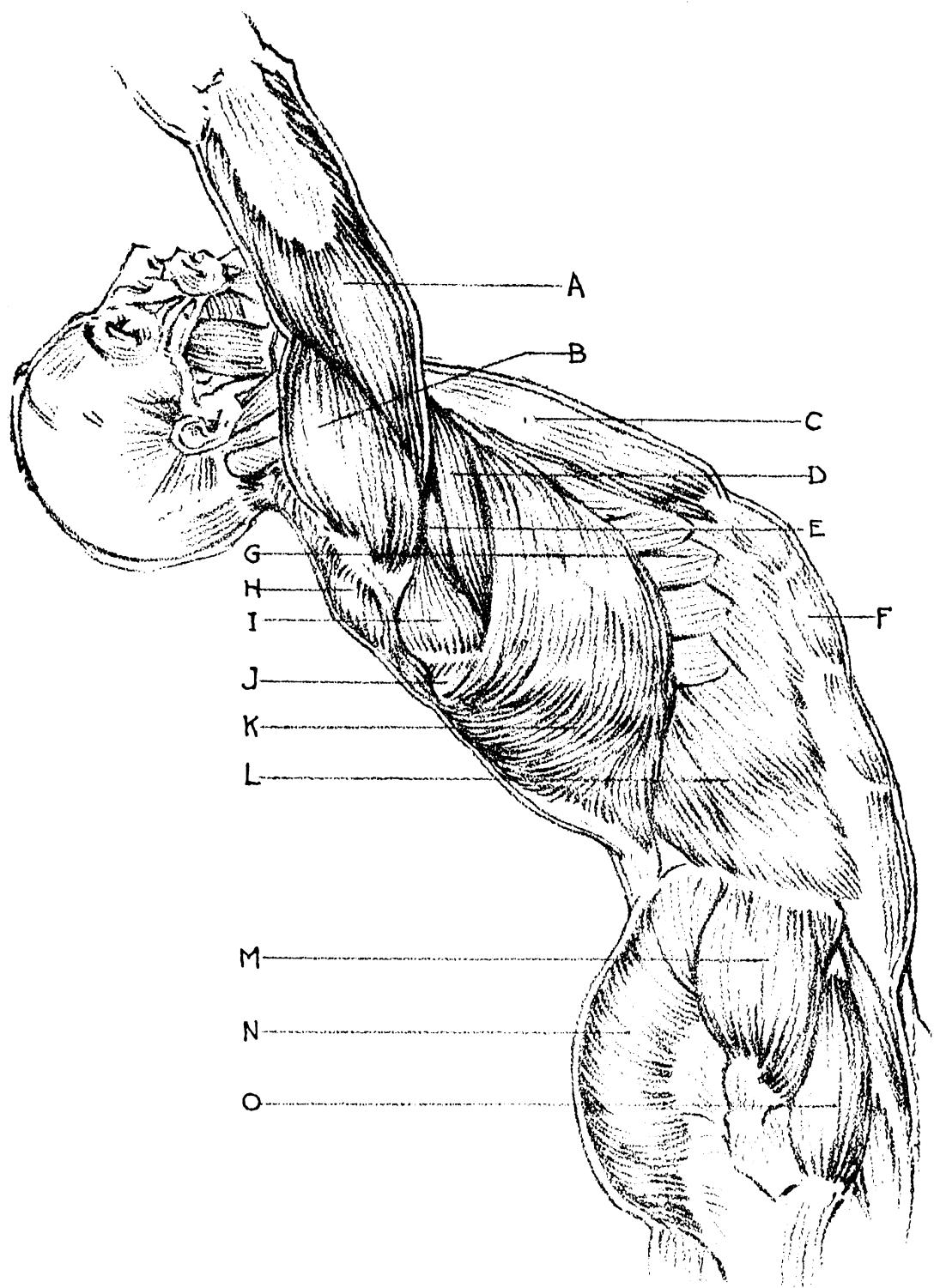
K — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

L — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).

M — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).

N — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh (refer to page 8).

O — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).



**MUSCLES OF THE NECK AND SHOULDER  
(FRONT AND SIDE VIEWS)**

**A — OMOMYOID** — A muscle originating in the scapula, inserting into the hyoid bone, its action being to pull back and depress the hyoid.

**B — STERNOHYOID** — A muscle originating in the sternum, inserting into the hyoid bone, its action being to depress the hyoid and voice box.

**C — STERNOCLIDOMASTOID** — A muscle which rotates and flexes the head (refer to page 5).

**D — TRAPEZIUS** — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

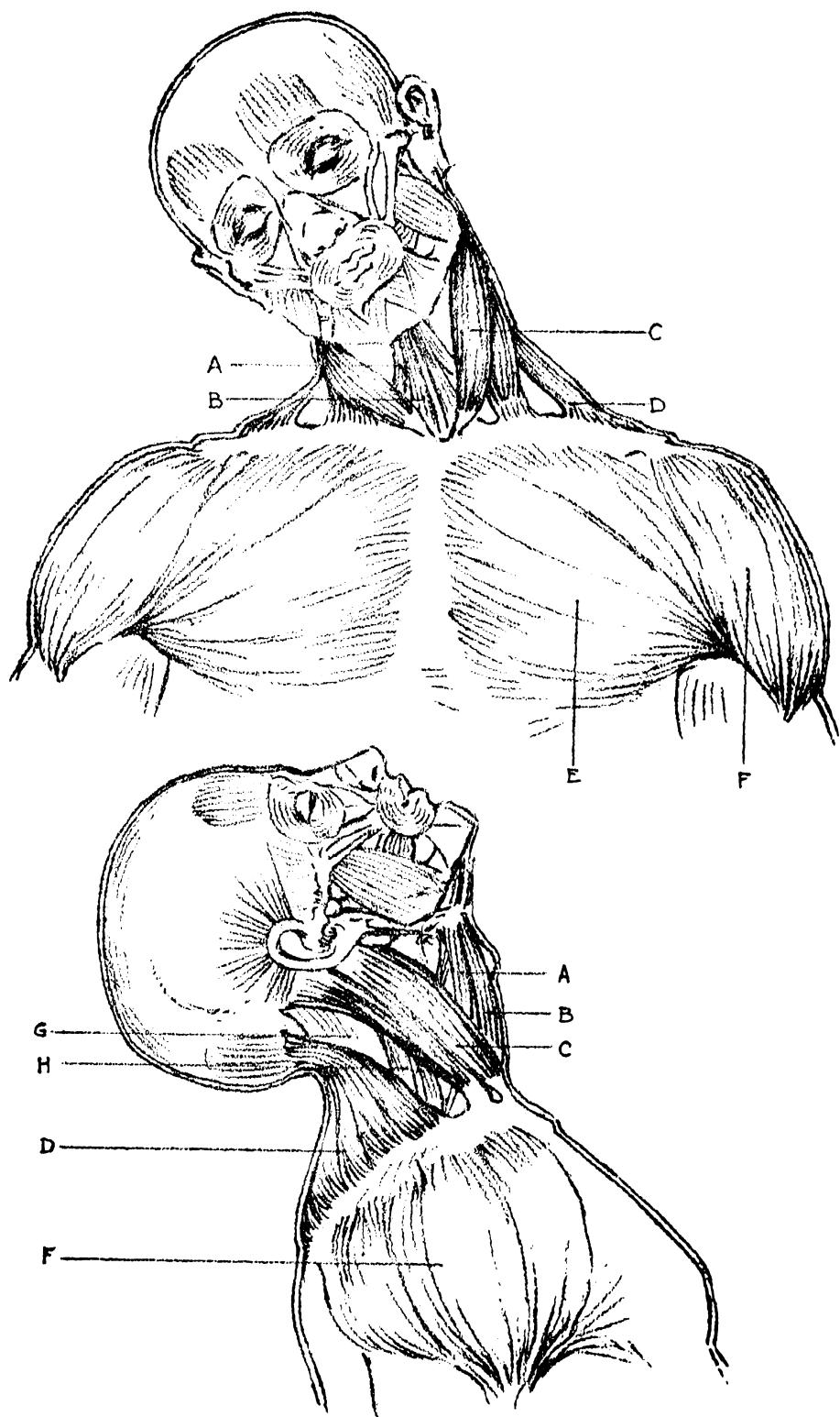
**E — PECTORALIS MAJOR** — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).

**F — DELTOID** — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

**G — SPLENIUS** — A muscle originating from the cervical vertebrae, inserting into the mastoid process, its action being to rotate and extend the head and neck and flex it sidewise.

**H — SCALENI MUSCLES** — Several muscles originating in the first and second ribs and lower cervicals, inserting into the cervical vertebrae, their action being to bend the neck sidewise.

**\*HYOID BONE** — The hyoid bone may be mentioned here: it is a horse-shoe shaped bone behind and below the lower jaw, and just above the voice box or larynx. To it are attached the sternohyoid and omohyoid muscles.



## MUSCLES OF THE NECK (FRONT AND SIDE VIEWS)

A — SPLENIUS — A muscle which rotates and extends the head and neck and flexes it sidewise (refer to page 28).

B — STERNOCLEIDOMASTOID — A muscle which rotates and flexes the head (refer to page 5).

C — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

D — SCALENUS MEDIUS — A muscle originating in the first rib, inserting into the second to sixth cervical vertebrae, its action being to flex the neck laterally.

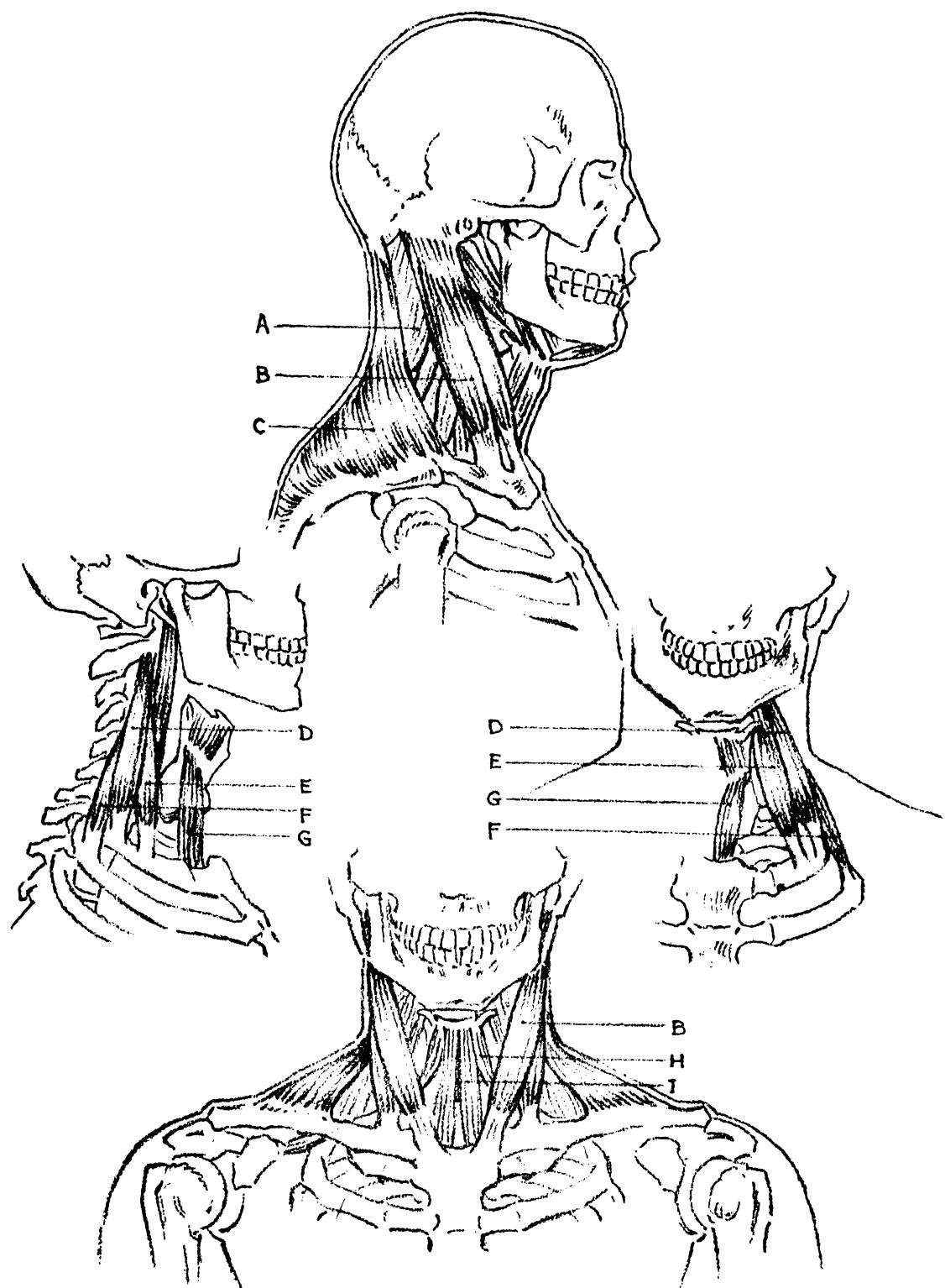
E — SCALENUS ANTERIOR — A muscle originating in the first rib, inserting into the third to sixth cervical vertebrae, its action being to support the head and flex the neck sidewise.

F — SCALENUS POSTERIOR — A muscle originating in the second rib, inserting into the three lower cervical vertebrae, its action being to bend the neck laterally.

G — STERNOHYOID — A muscle originating from the sternum, inserting into the voice box (larynx), its action being to depress the larynx.

H — OMOHYOID — A muscle which pulls back and depresses the hyoid (refer to page 28).

I — STERNOHYOID — A muscle which depresses the hyoid bone and larynx (refer to page 28).



## MUSCLES OF THE NECK AND SHOULDER

## (FRONT AND SIDE VIEWS)

A — **OMOHYOID** — A muscle which retracts and depresses the hyoid (refer to page 28).

B — **STERNOHYOID** — A muscle which depresses the hyoid and larynx (refer to page 28).

C — **SPLENIUS** — A muscle which rotates and extends the head and neck and flexes it sidewise (refer to page 28).

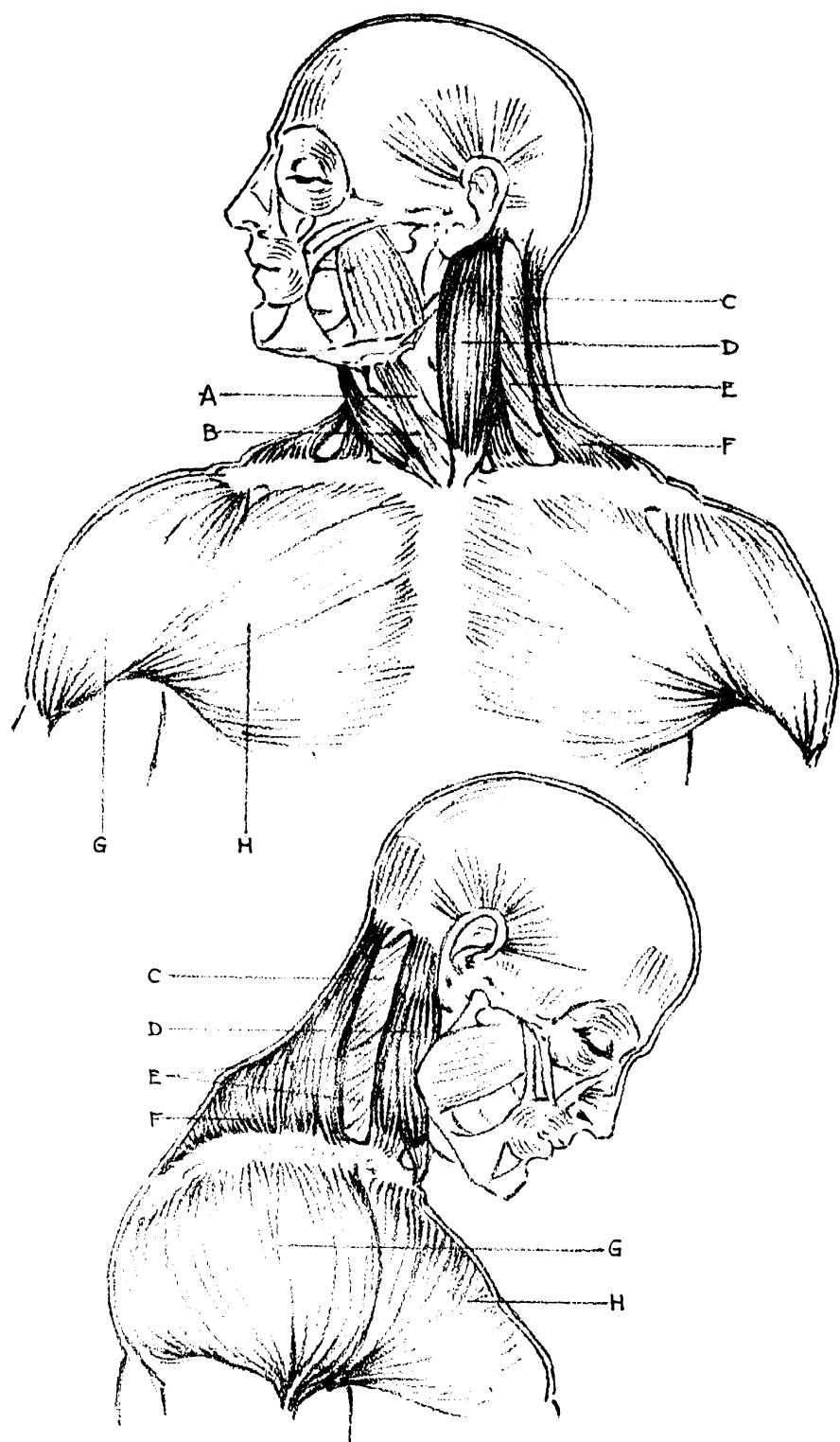
D — **STERNOCLÉIDOMASTOID** — A muscle which rotates and flexes the head (refer to page 5).

E — **SCALENI MUSCLES** — Muscles which support the head and bend the head and neck sidewise (refer to pages 28 and 29).

F — **TRAPEZIUS** — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

G — **DELTOID** — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

H — **PECTORALIS MAJOR** — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).



## MUSCLES OF THE TRUNK (SIDE VIEW)

A — STERNOCLÉIDOMASTOID — A muscle which rotates and flexes the head (refer to page 5).

B — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

C — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

D — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to pages 7 and 13).

E — TERES MAJOR — A muscle which adducts, extends and rotates the arm medially (refer to page 15).

F — PECTORALIS MAJOR — A muscle which adducts, flexes and rotates the arm medially.

G — INFRASPINATUS — A muscle which rotates the arm laterally (refer to page 15).

H — SERRATUS MAGNUS — A muscle which brings forward and rotates the scapula (refer to page 16).

I — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

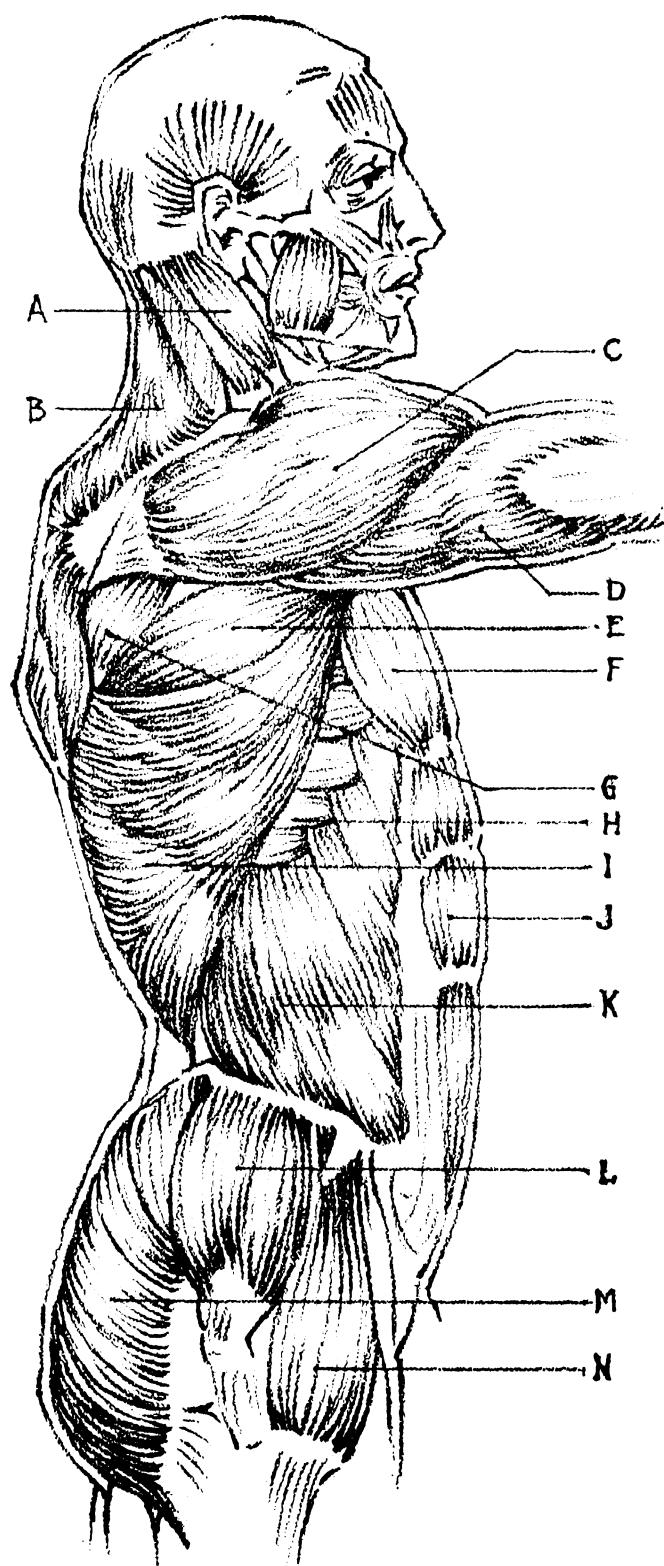
J — RECTUS ABDOMINIS — A muscle which compresses the abdomen and flexes the body (refer to page 5).

K — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).

L — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).

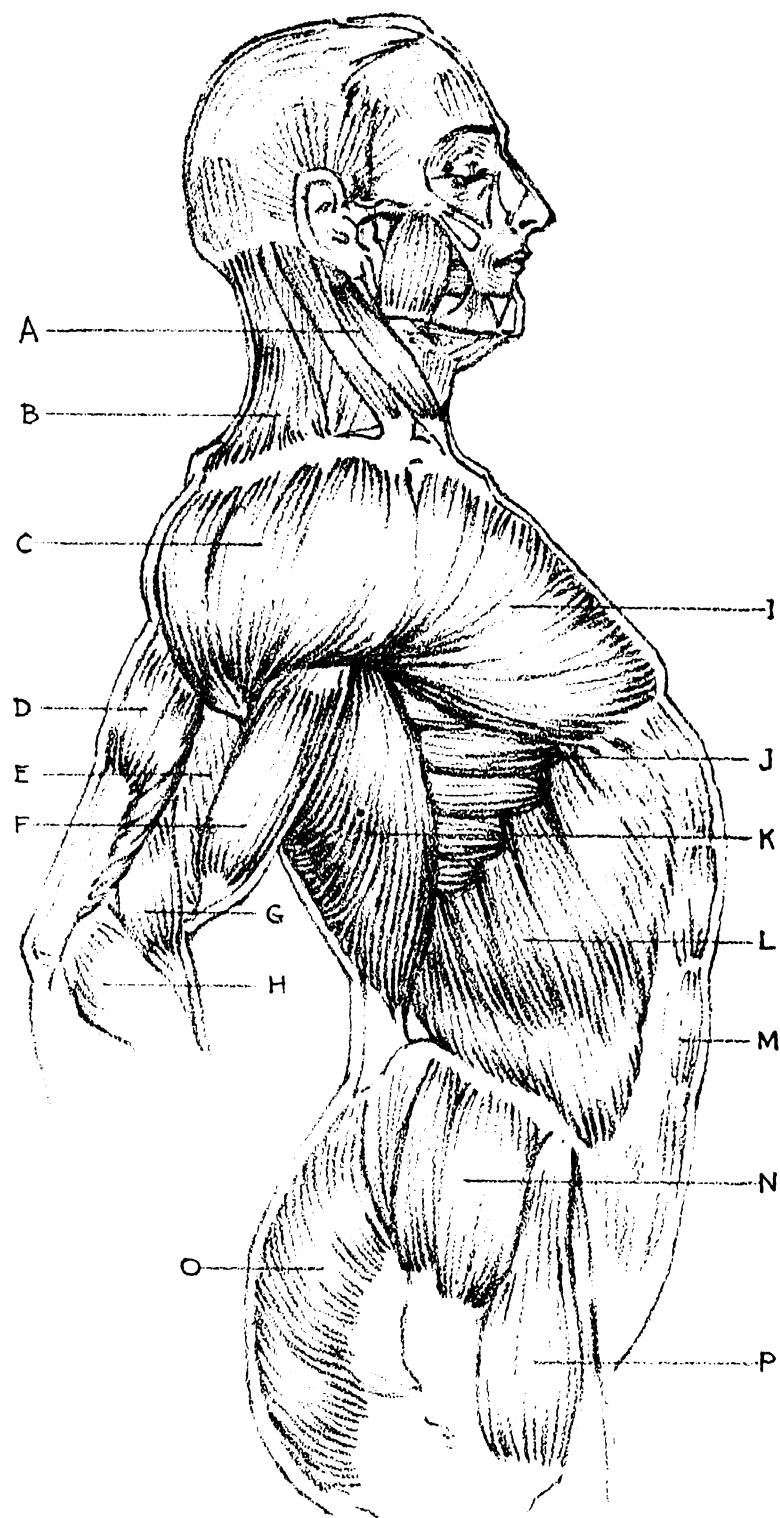
M — GLUTEUS MAXIMUS — A muscle which rotates, abducts and extends the thigh (refer to page 8).

N — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).



## MUSCLES OF THE TRUNK (SIDE VIEW)

- A — STERNOCLEIDOMASTOID — A muscle which rotates and flexes the head (refer to page 5).
- B — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- C — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- D — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to pages 7 and 13).
- E — BRACHIALIS ANTICUS — A muscle which flexes the forearm (refer to page 5).
- F — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).
- G — BRACHIORADIALIS — A muscle which supinates the hand (refer to page 5).
- H — EXTENSOR CARPI RADIALIS LONGIOR — A muscle which extends and abducts the wrist (refer to page 5).
- I — PECTORALIS MAJOR — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).
- J — SERRATUS MAGNUS — A muscle which brings forward and rotates the scapula (refer to page 5).
- K — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).
- L — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).
- M — RECTUS ABDOMINIS — A muscle which compresses the abdomen and flexes the body (refer to page 5).
- N — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- O — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh outward (refer to page 8).
- P — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).



## MUSCLES OF THE TRUNK (SIDE VIEW)

A — **TRAPEZIUS** — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

B — **STERNOCLÉIDOMASTOID** — A muscle which rotates and flexes the head (refer to page 5).

C — **DELTOID** — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

D — **PECTORALIS MAJOR** — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).

E — **BRACHIALIS ANTICUS** — A muscle which flexes the forearm (refer to page 5).

F — **BICEPS BRACHII** — A muscle which flexes, supinates and adducts the arm (refer to page 5).

G — **SERRATUS MAGNUS** — A muscle which brings forward and rotates the scapula (refer to page 5).

H — **LATISSIMUS DORSI** — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

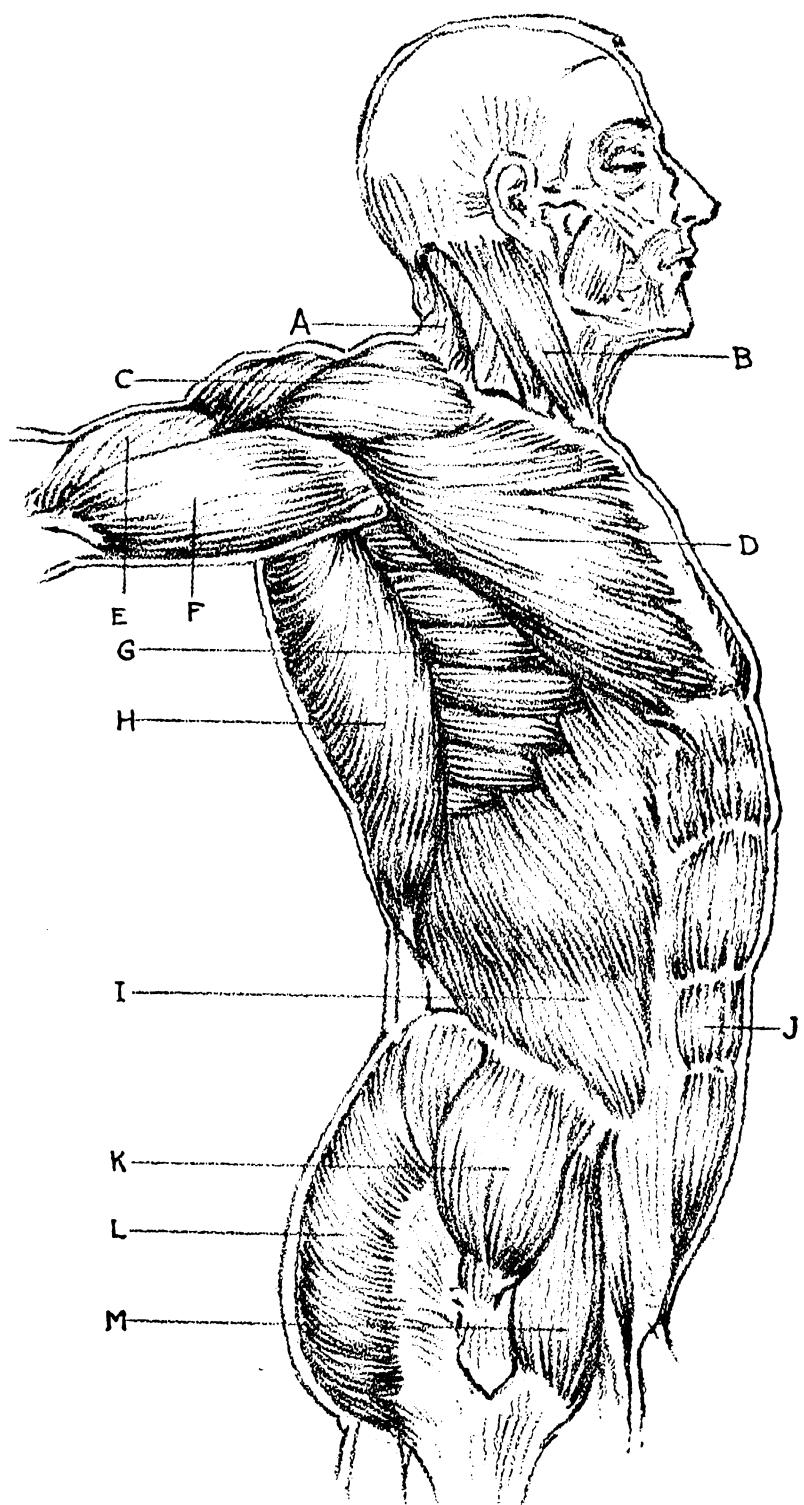
I — **EXTERNAL OBLIQUE** — A muscle which compresses the abdomen (refer to page 5).

J — **RECTUS ABDOMINIS** — A muscle which compresses the abdomen and flexes the body.

K — **GLUTEUS MEDIUS** — A muscle which rotates, abducts and extends the thigh (refer to page 5).

L — **GLUTEUS MAXIMUS** — A muscle which extends, abducts and rotates the thigh (refer to page 8).

M — **TENSOR FASCIAE LATAE** — A muscle which tenses the thigh (refer to page 5).



## MUSCLES OF THE TRUNK (SIDE VIEW)

A — **STERNOCLÉIDOMASTOID** — A muscle which rotates and flexes the head (refer to page 5).

B — **TRAPEZIUS** — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

C — **DELTOID** — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

D — **INFRASPINATUS** — A muscle which rotates the arm laterally (refer to page 15).

E — **RHOMBOID MUSCLES** — Two muscles which retract and elevate the scapula (refer to page 26).

F — **TERES MAJOR** — A muscle which adducts, extends and rotates the arm medially (refer to page 15).

G — **TRICEPS BRACHII** — A muscle which extends the arm and forearm (refer to pages 7 and 13).

H — **SERRATUS MAGNUS** — A muscle which brings forward and rotates the scapula (refer to page 5).

I — **LATISSIMUS DORSI** — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

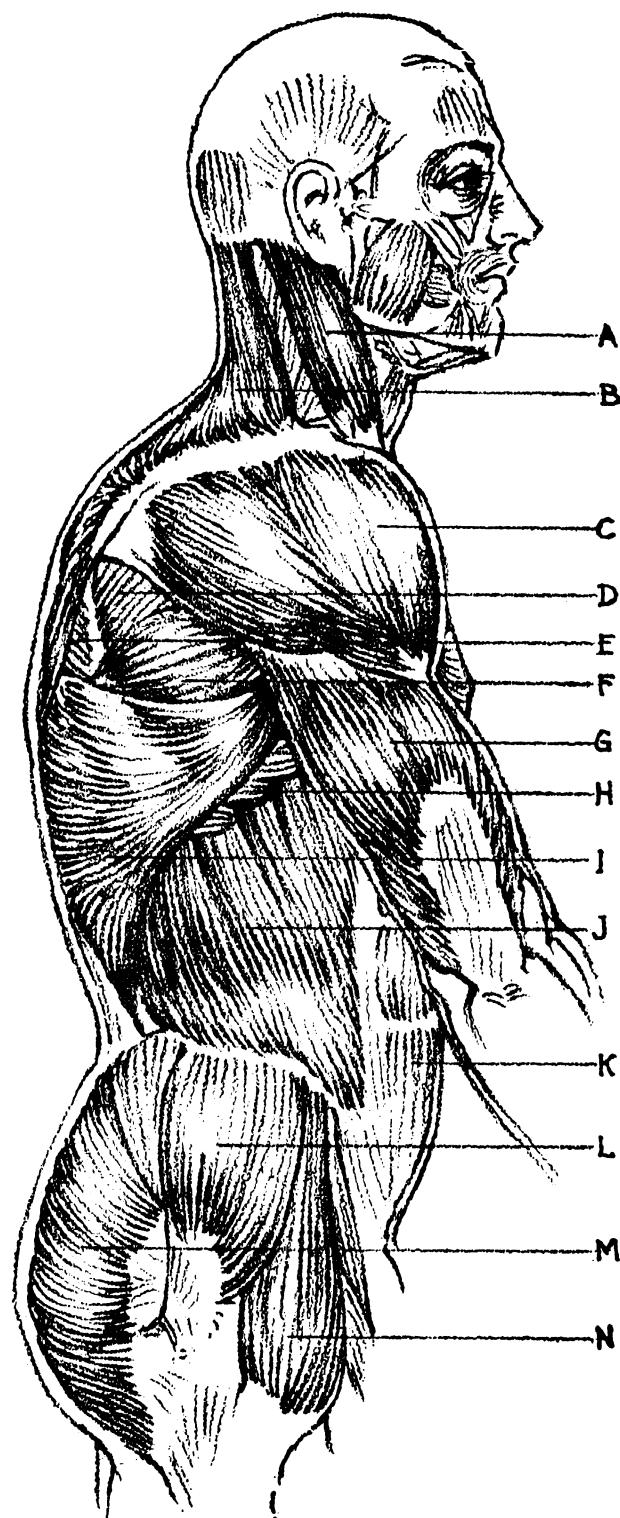
J — **EXTERNAL OBLIQUE** — A muscle which compresses the abdomen (refer to page 5).

K — **RECTUS ABDOMINIS** — A muscle which compresses the abdomen and flexes the body (refer to page 5).

L — **GLUTEUS MEDIUS** — A muscle which rotates, abducts and extends the thigh (refer to page 5).

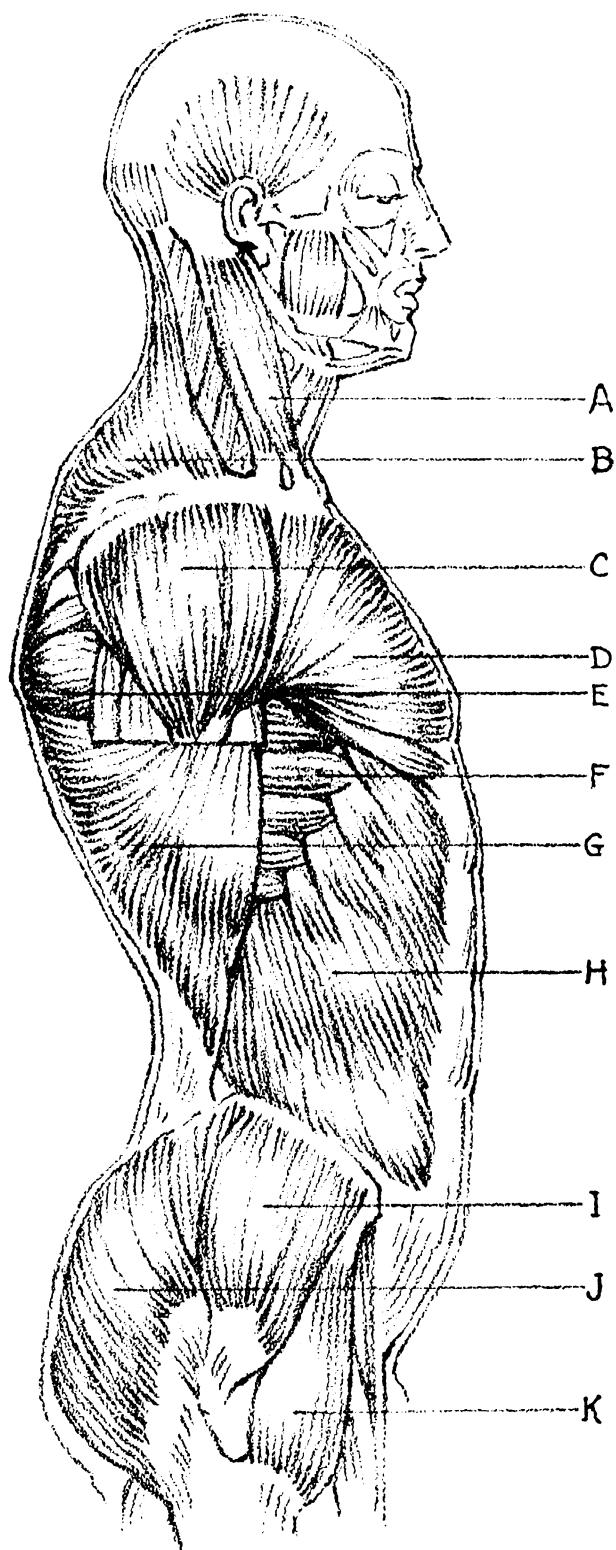
M — **GLUTEUS MAXIMUS** — A muscle which rotates, abducts and extends the thigh (refer to page 8).

N — **TENSOR FASCIAE LATAE** — A muscle which tenses the thigh (refer to page 5).



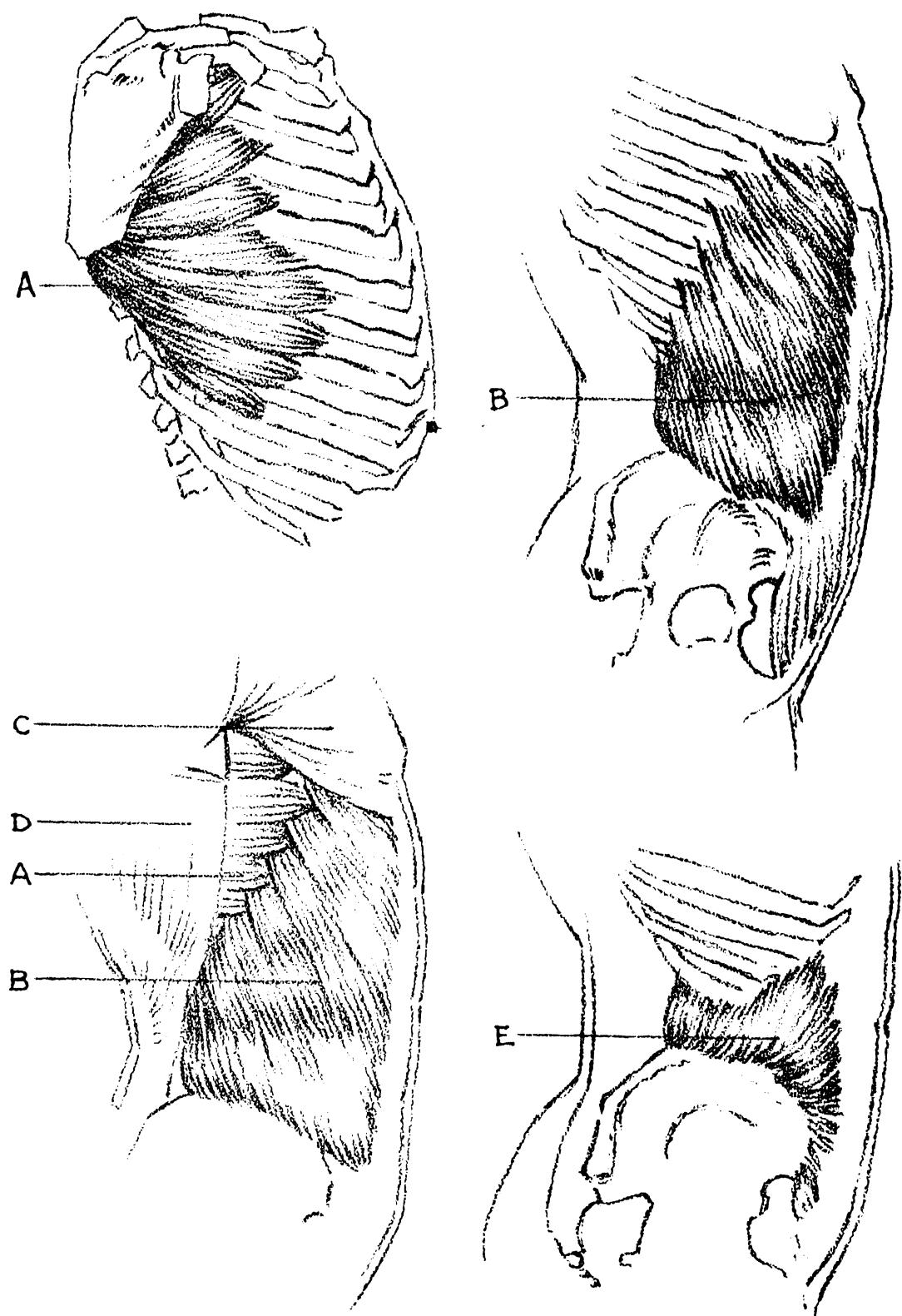
## MUSCLES OF THE TRUNK (SIDE VIEW)

- A — STERNOCLEIDOMASTOID — A muscle which rotates and flexes the head (refer to page 5).
- B — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- C — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- D — PECTORALIS MAJOR — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).
- E — TERES MAJOR — A muscle which adducts, extends and rotates the arm medially (refer to page 15).
- F — SERRATUS MAGNUS — A muscle which brings forward and rotates the scapula (refer to page 5).
- G — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).
- H — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).
- I — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- J — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh (refer to page 8).
- K — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).



## MUSCLES OF THE TRUNK (SIDE VIEW)

- A — **SERRATUS MAGNUS** — A muscle which brings forward and rotates the scapula (refer to page 5).
- B — **EXTERNAL OBLIQUE** — A muscle which compresses the abdomen (refer to page 5).
- C — **PECTORALIS MAJOR** — A muscle which adducts, flexes and rotates the arm medially (refer to page 16).
- D — **LATISSIMUS DORSI** — A muscle which draws the arm downward and backward and rotates it (refer to page 10).
- E — **INTERNAL OBLIQUE** — A muscle originating from the upper portion of the ilium and inserting into the lower six ribs, pubis and mid-line (center line of the body), its action being to compress the abdomen and flex the body.



## MUSCLES OF THE ARM AND FOREARM

## (SIDE AND INSIDE VIEWS)

A — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

B — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).

C — BRACHIALIS ANTICUS — A muscle which flexes the forearm (refer to page 5).

D — BRACHIORADIALIS — A muscle which supinates the hand and flexes the forearm (refer to pages 5 and 13).

E — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to page 13).

F — TENDON OF TRICEPS — A tendon through which the triceps brachii muscle inserts into the olecranon process of the ulna (refer to page 13).

G — ANconeus — A muscle which extends the forearm (refer to page 7).

H — EXTENSOR CARPI RADIALIS LONGIOR — A muscle which extends the wrist (refer to page 13).

I — EXTENSOR CARPI ULNARIS — A muscle which extends and abducts the wrist (refer to page 13).

J — EXTENSOR COMMUNIS DIGITORUM — A muscle which extends the fingers (refer to page 7).

K — EXTENSOR CARPI RADIALIS BREVIOR — A muscle which extends and abducts the wrist (refer to page 16).

L — EXTENSORS OF THE THUMB — The action of these muscles is to extend the thumb (refer to page 7).

M — FLEXOR CARPI ULNARIS — A muscle which flexes and adducts the wrist (refer to page 13).

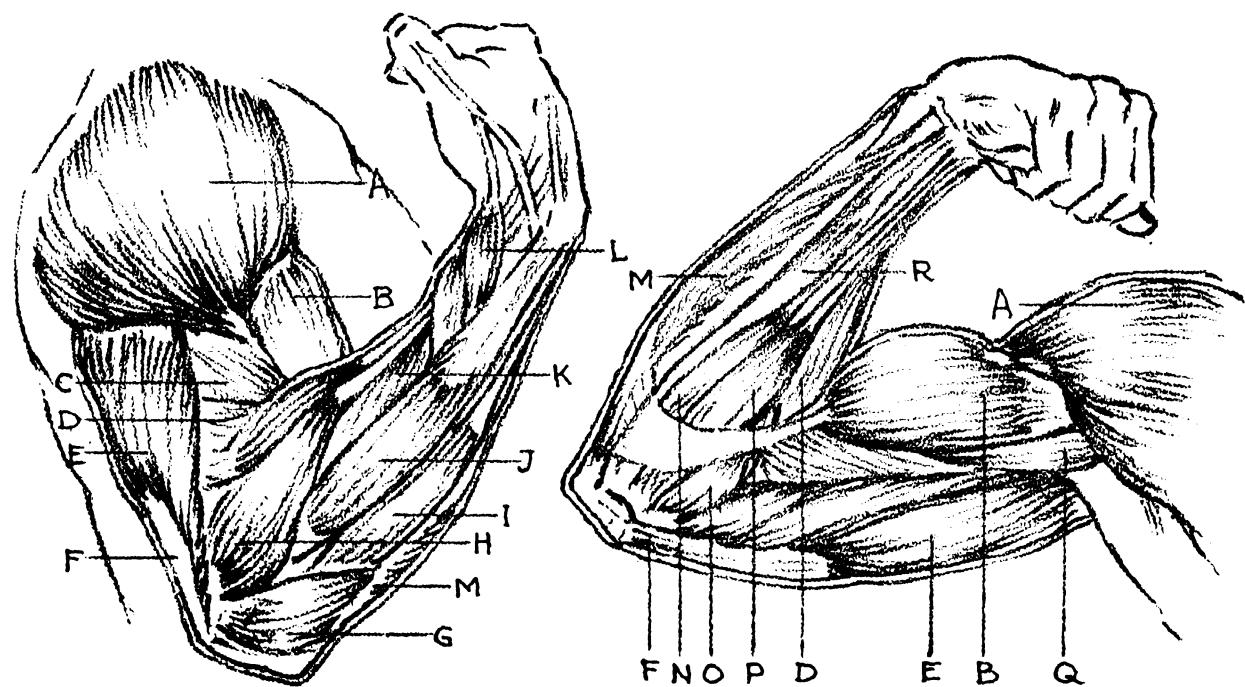
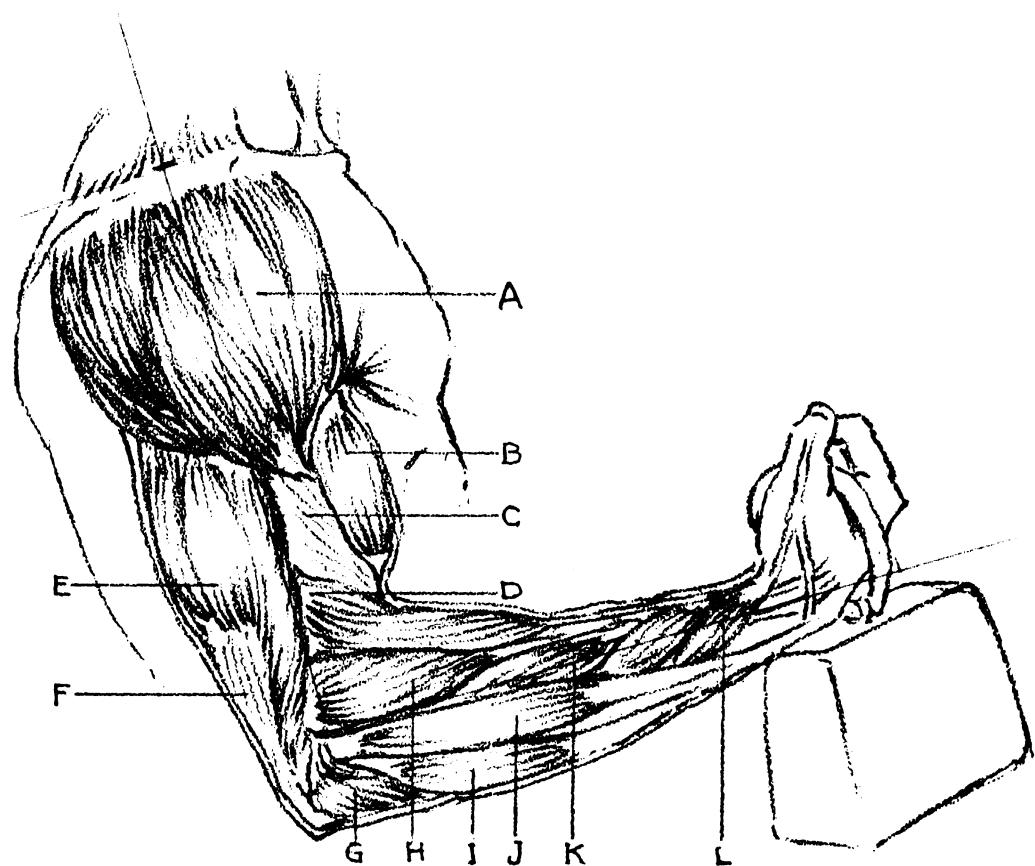
N — PALMARIS LONGUS — A muscle which stretches the palm (refer to page 16).

O — PRONATOR RADII TERES — A muscle which pronates the hand (refer to page 23).

P — FLEXOR CARPI RADIALIS — A muscle which flexes and abducts the wrist (refer to page 16).

Q — CORACOBRACHIALIS — A muscle which flexes and adducts the arms (refer to page 20).

R — DEEP FLEXORS OF THE HAND — Muscles originating in the humerus, radius and ulna, inserting into the fingers, their action being to flex the fingers.



## MUSCLES OF THE ARM (BACK VIEWS)

A — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

B — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to page 13).

C — TRICEPS TENDON — A tendon through which the triceps brachii muscle inserts into the olecranon process of the ulna (refer to page 13).

D — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).

E — BRACHIALIS ANTICUS — A muscle which flexes the forearm (refer to page 5).

F — EXTENSOR CARPI RADIALIS LONGIOR — A muscle which extends and abducts the wrist (refer to page 16).

G — PRONATOR RADII TERES — A muscle which pronates the hand (refer to page 23).

H — ANCONEUS — A muscle which extends the forearm (refer to page 7).

I — EXTENSOR CARPI ULNARIS — A muscle which extends and abducts the wrist (refer to page 13).

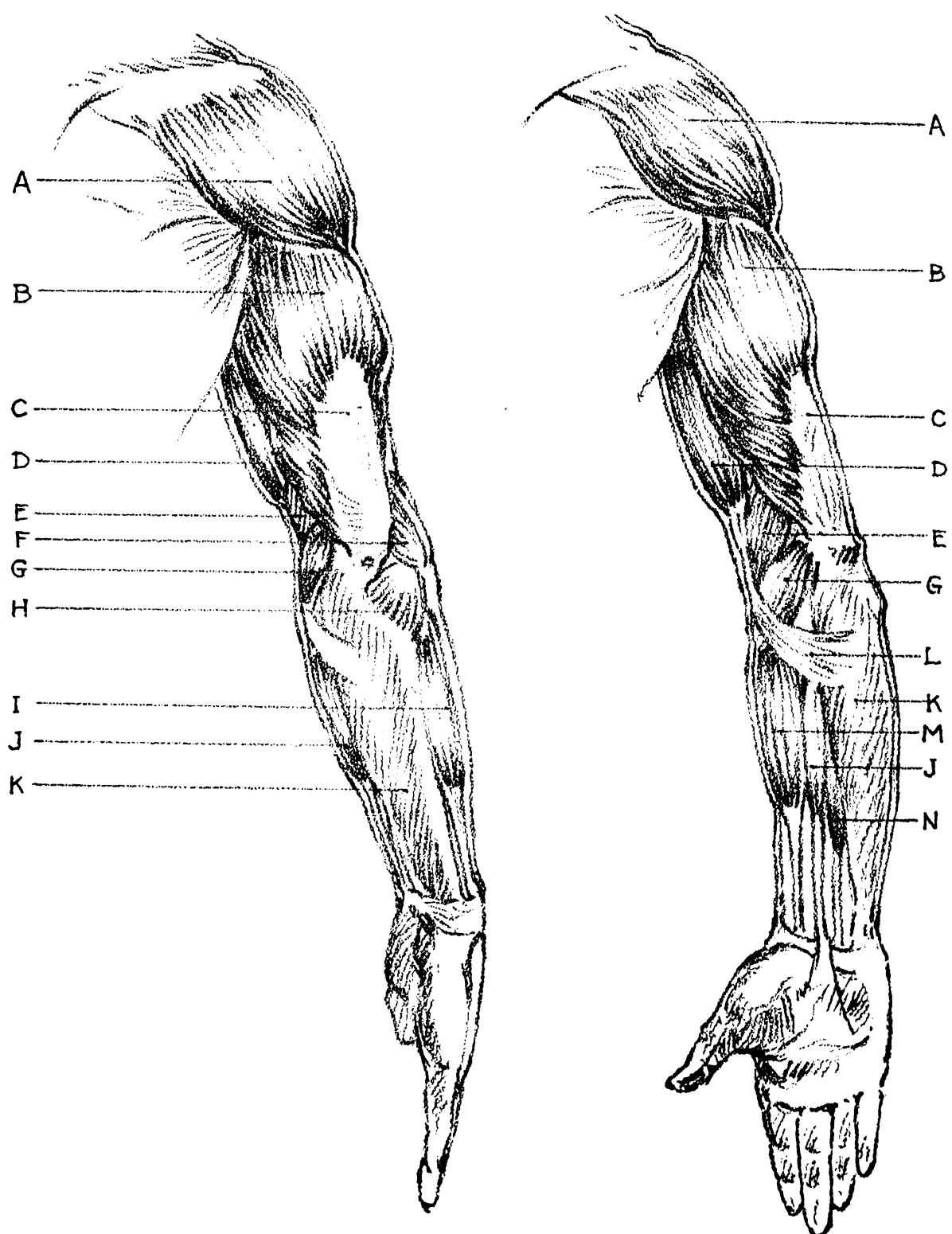
J — PALMARIS LONGUS — A muscle which extends and adducts the wrist (refer to page 16).

K — FLEXOR CARPI ULNARIS — A muscle which flexes and adducts the wrist (refer to page 13).

L — BICIPITAL FASCIA — Tendinous tissue, that part of the insertion of the biceps muscle that passes across the inner bend of the elbow (refer to page 23).

M — FLEXOR CARPI RADIALIS — A muscle which flexes and abducts the wrist (refer to page 16).

N — FLEXORS OF THE HAND — Muscles which flex the fingers (refer to page 37).



**MUSCLES OF THE ARM AND FOREARM (FRONT VIEW)**

A — **CORACOBRACHIALIS** — A muscle which flexes and adducts the arm (refer to page 20).

B — **BRACHIALIS ANTICUS** — A muscle which flexes the forearm (refer to page 5).

C — **BICEPS BRACHII** — A muscle which flexes, supinates and adducts the arm (refer to page 5).

D — **PRONATOR RADII TERES** — A muscle which pronates the hand (refer to page 23).

E — **FLEXOR CARPI RADIALIS** — A muscle which flexes and abducts the wrist (refer to page 16).

F — **PALMARIS LONGUS** — A muscle which stretches the palm (refer to page 16).

G — **FLEXOR CARPI ULNARIS** — A muscle which flexes and adducts the wrist (refer to page 13).

H — **BRACHIORADIALIS** — A muscle which supinates the hand and flexes the forearm (refer to page 5).

I — **EXTENSOR CARPI RADIALIS LONGIOR** — A muscle which extends and abducts the wrist (refer to page 5).

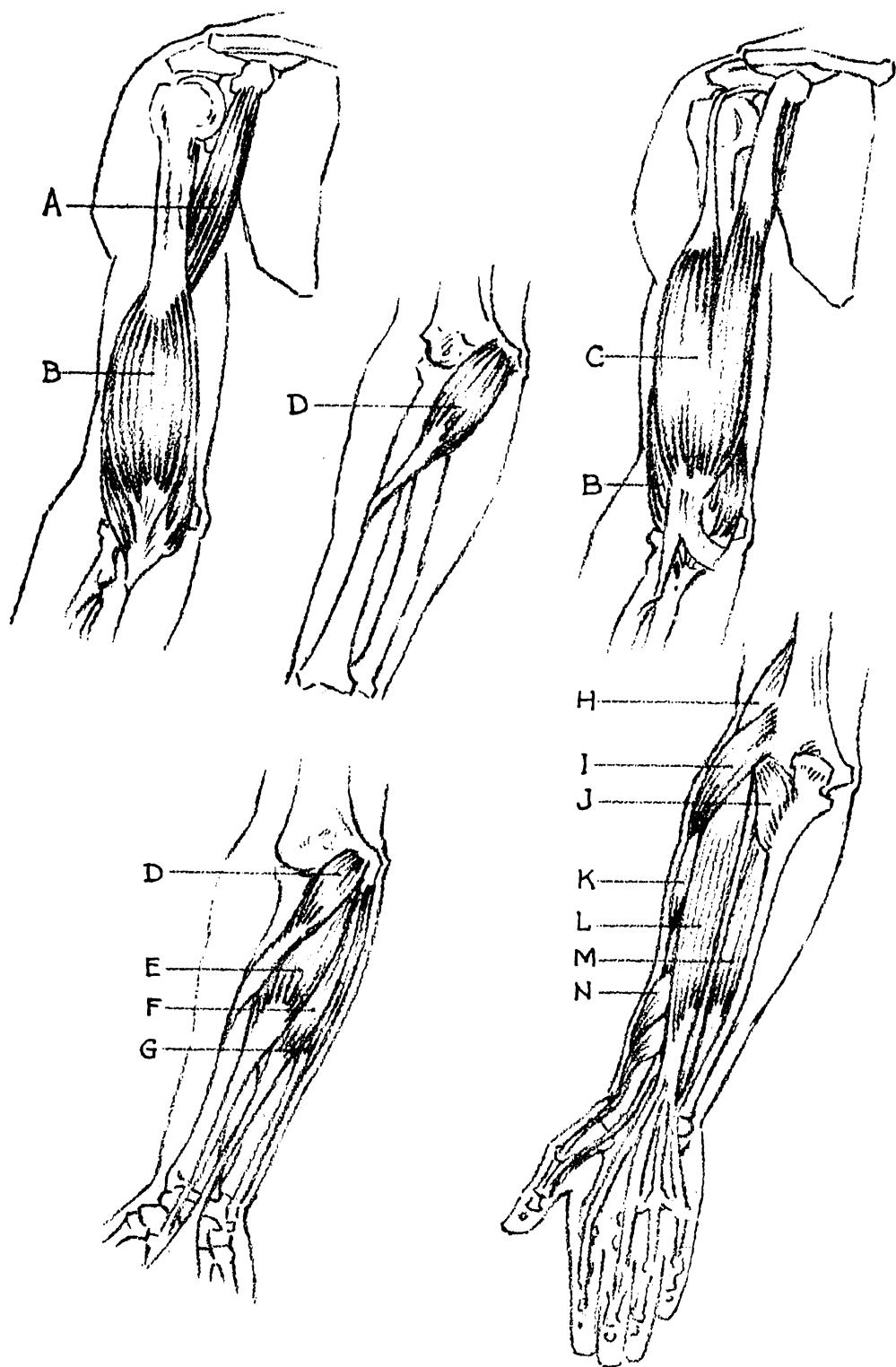
J — **ANconeus** — A muscle which extends the forearm (refer to page 7).

K — **EXTENSOR CARPI RADIALIS BREVIOR** — A muscle which extends and abducts the wrist (refer to page 7).

L — **EXTENSOR COMMUNIS DIGITORUM** — A muscle which extends the fingers (refer to page 7).

M — **EXTENSOR CARPI ULNARIS** — A muscle which extends and abducts the wrist (refer to page 13).

N — **EXTENSORS** — Muscles originating in the humerus, inserting into the fingers, their action being to extend the fingers and bend the wrist.



## MUSCLES OF THE ARM AND FOREARM (FRONT VIEW)

A — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

B — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to page 13).

C — BRACHIALIS ANTICUS — A muscle which flexes the forearm (refer to page 7).

D — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).

E — BRACHIORADIALIS — A muscle which supinates the hand and flexes the forearm (refer to page 5).

F — EXTENSOR CARPI RADIALIS LONGIOR — A muscle which extends and abducts the wrist (refer to page 5).

G — FLEXOR CARPI RADIALIS — A muscle which flexes and abducts the wrist (refer to page 16).

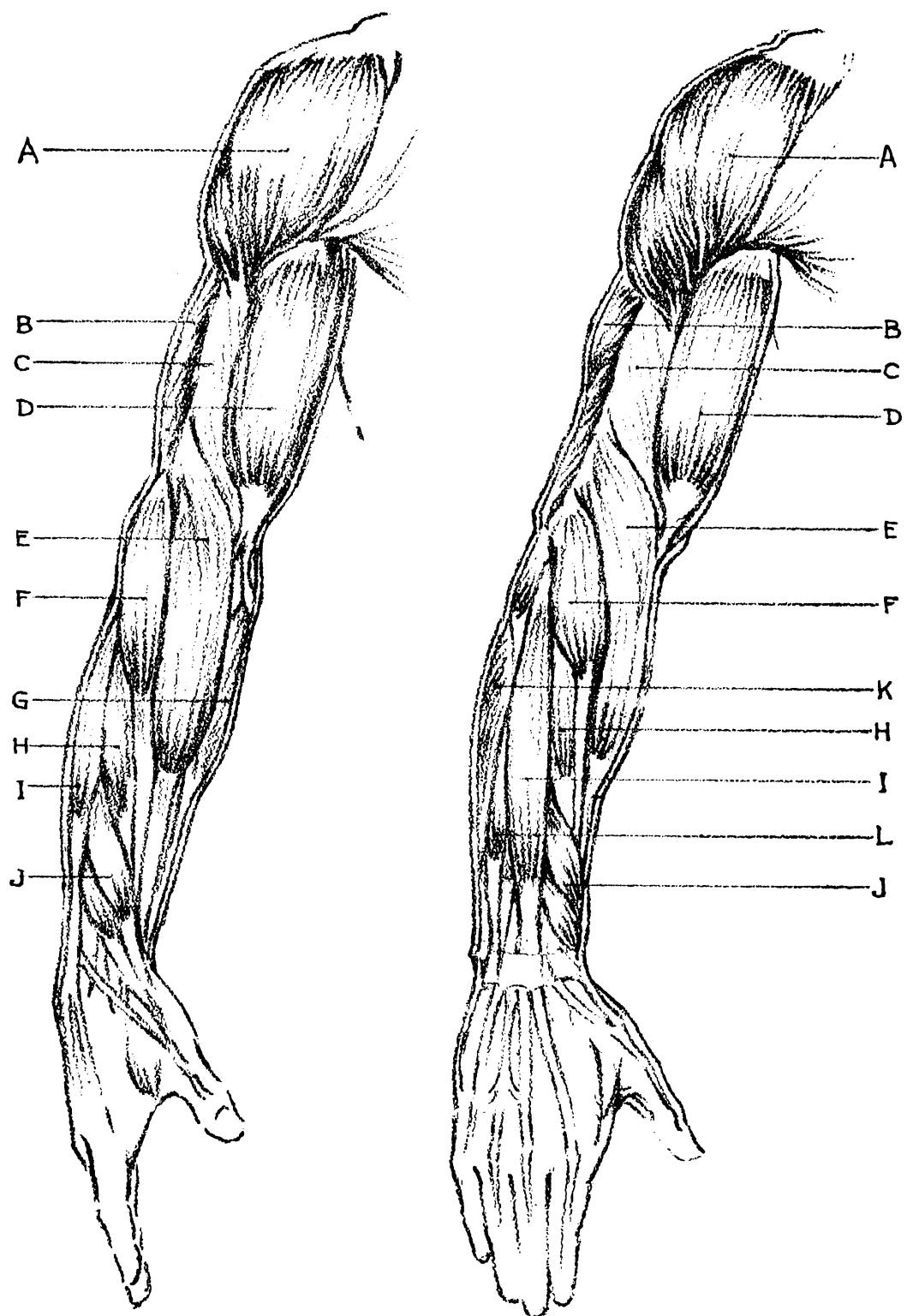
H — EXTENSOR CARPI RADIALIS BREVIOR — A muscle which extends and abducts the wrist (refer to page 7).

I — EXTENSOR COMMUNIS DIGITORUM — A muscle which extends the fingers (refer to page 7).

J — EXTENSORS OF THE THUMB — These muscles extend the thumb (refer to page 7).

K — FLEXOR CARPI ULNARIS — A muscle which flexes and adducts the wrist (refer to page 13).

L — EXTENSOR CARPI ULNARIS — A muscle which extends and abducts the wrist (refer to page 13).



## MUSCLES AND BONES OF THE ARM AND FOREARM

A — CLAVICLE — The collarbone, side view (refer to pages 3, 6, 13, 23 and 57).

B — SCAPULA — The shoulder blade shown in side view (refer to page 6).

C — HUMERUS — The bone of the upper arm (refer to pages 3, 4 and 6).

D — ULNA — The larger of the two bones of the forearm (refer to pages 4 and 57).

E — RADIUS — The smaller of the two bones of the forearm (refer to pages 4 and 57).

F — CORACOBRACHIALIS — A muscle which flexes and adducts the arm (refer to page 20).

G — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to page 7).

H — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).

I — BRACHIALIS ANTICUS — A muscle which flexes the forearm (refer to page 7).

J — PRONATOR RADII TERES — A muscle originating in the humerus and ulna, inserting into the radius, its action being to pronate the hand.

K — BRACHIORADIALIS — A muscle which supinates the hand and flexes the forearm (refer to pages 5 and 13).

L — FLEXOR CARPI RADIALIS — A muscle which flexes the wrist (refer to page 16).

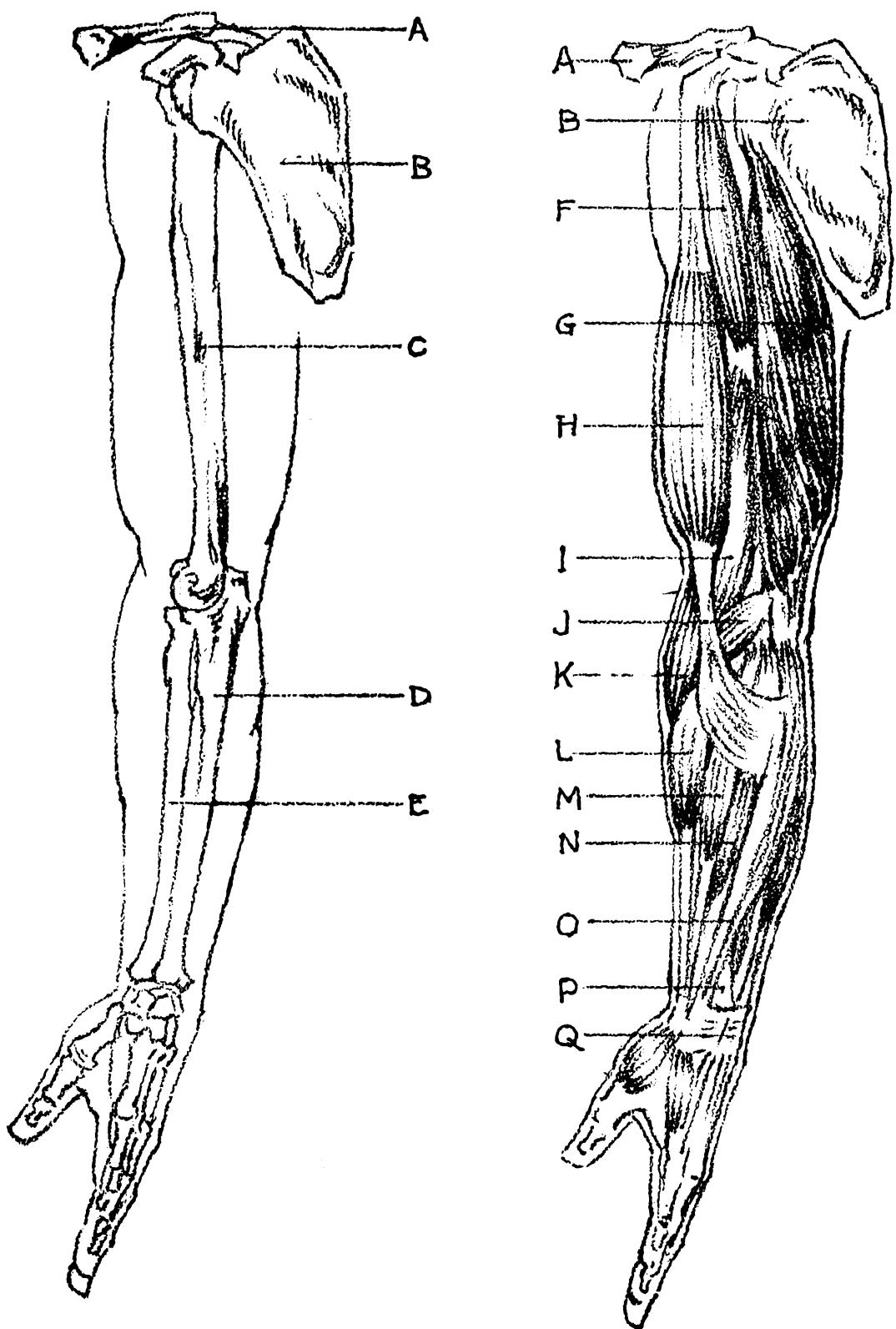
M — PALMARIS LONGUS — A muscle which stretches the palm (refer to page 16).

N — FLEXORS OF THE HAND — Muscles which flex the fingers (refer to page 37).

O — FLEXOR CARPI ULNARIS — A muscle which flexes and adducts the wrist (refer to page 13).

P — HEAD OF THE Ulna — An expanded part of the ulna bone (refer to page 4).

Q — POSTERIOR ANNULAR LIGAMENT — A fibrous band which encircles the back of the wrist.



## MUSCLES OF THE ARM AND FOREARM (SIDE VIEW)

A — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

B — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to page 13).

C — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).

D — BRACHIALIS ANTICUS — A muscle which flexes the forearm (refer to page 5).

E — BRACHIORADIALIS — A muscle which supinates the hand and flexes the forearm (refer to page 13).

F — EXTENSOR CARPI RADIALIS LONGIOR — A muscle which extends and abducts the wrist (refer to page 5).

G — ANconeus — A muscle which extends the forearm (refer to page 7).

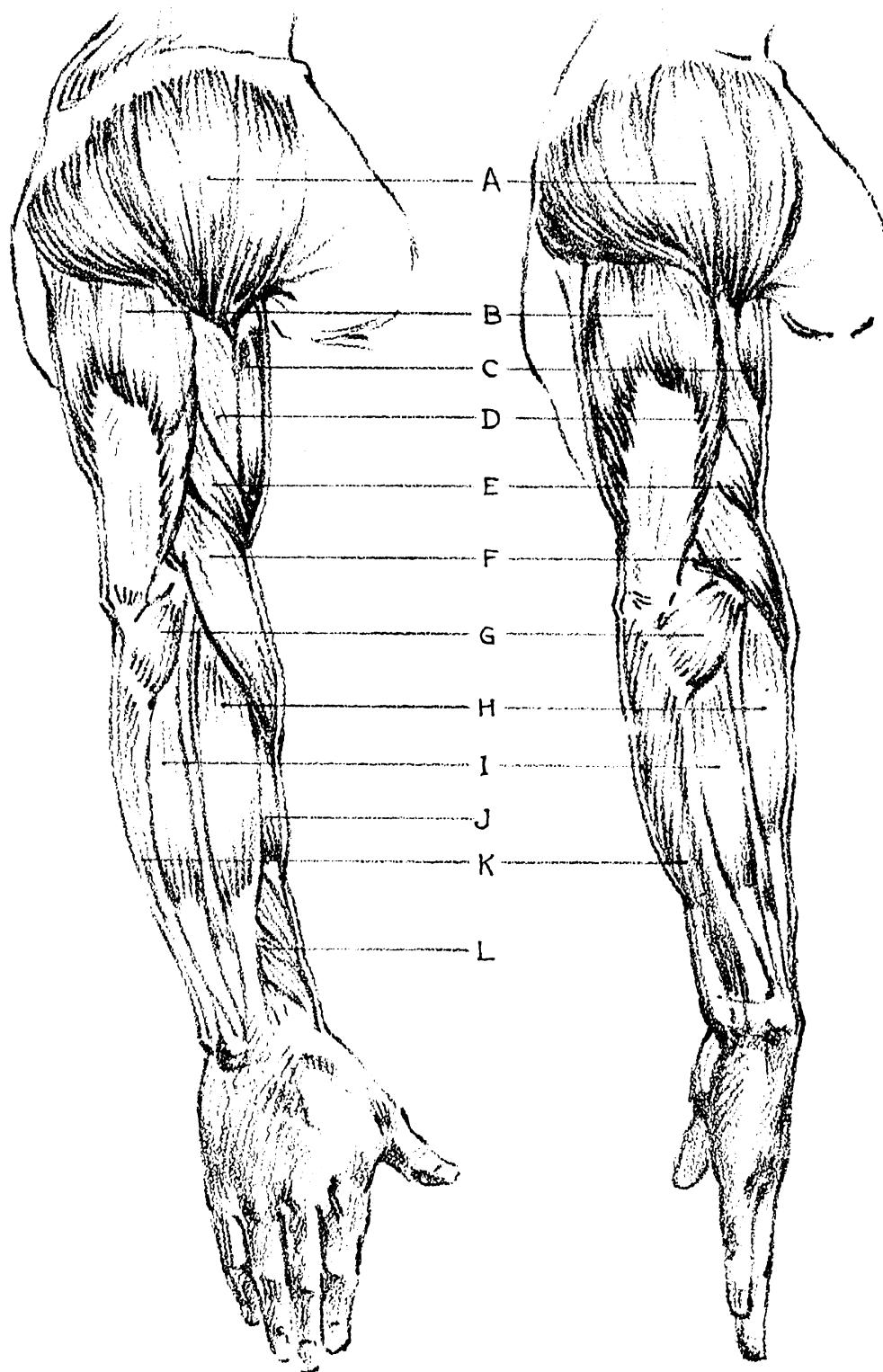
H — EXTENSOR COMMUNIS DIGITORUM — A muscle which extends the fingers (refer to page 7).

I — EXTENSOR CARPI ULNARIS — A muscle which extends and abducts the wrist (refer to page 13).

J — EXTENSOR CARPI RADIALIS BREVIOR — A muscle which extends and abducts the wrist (refer to page 7).

K — FLEXOR CARPI ULNARIS — A muscle which flexes and adducts the wrist (refer to page 13).

L — EXTENSORS OF THE THUMB — These muscles extend the thumb (refer to page 7).



## BONES AND MUSCLES OF THE PELVIS

A — FRONT VIEW OF PELVIS — Showing the sockets for attachment of the femur (refer to pages 3 and 12).

B — BACK VIEW OF PELVIS — Showing the sacrum joining the hipbones (refer to pages 3 and 12).

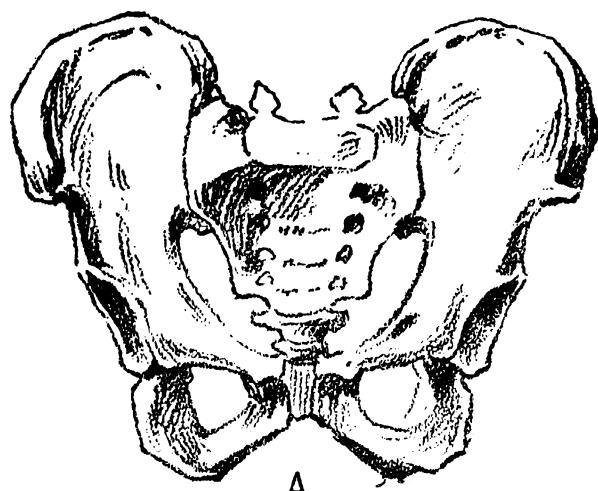
C — SIDE VIEW OF PELVIS — Showing the very lowest extremity of the spine (refer to pages 3 and 12).

E — GLUTEUS MAXIMUS — (Side view shown)\* — A muscle which rotates, abducts and extends the thigh (refer to page 5).

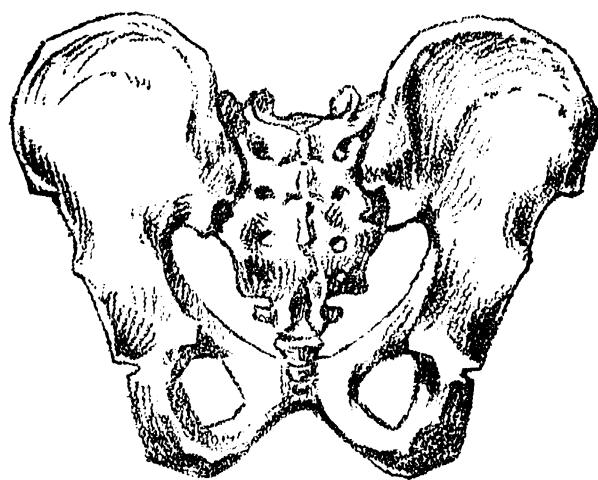
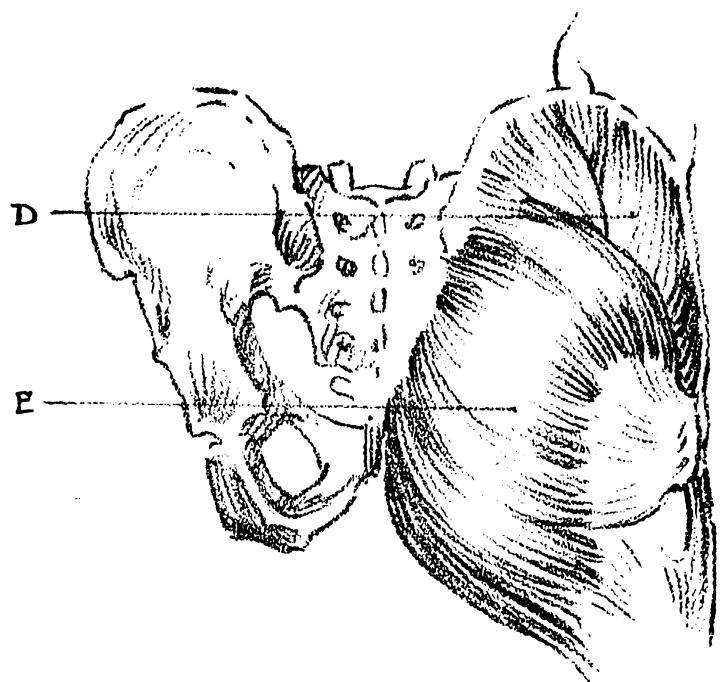
E — GLUTEUS MAXIMUS — (S $\frac{1}{4}$  view shown)\* — A muscle which extends, abducts and rotates the thigh outward (refer to page 8).

F — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).

\*THE GLUTEAL MUSCLES (three in number) are broad fleshy masses covering the hip part of the sacrum and are attached to the upper part of the leg at the pelvis. The gluteus maximus is the largest of the three gluteal muscles, its most powerful action being to cause the body to regain the erect position after stooping by drawing the pelvis backward. The gluteus medius and minimus are principally called into action by supporting the body on one limb.



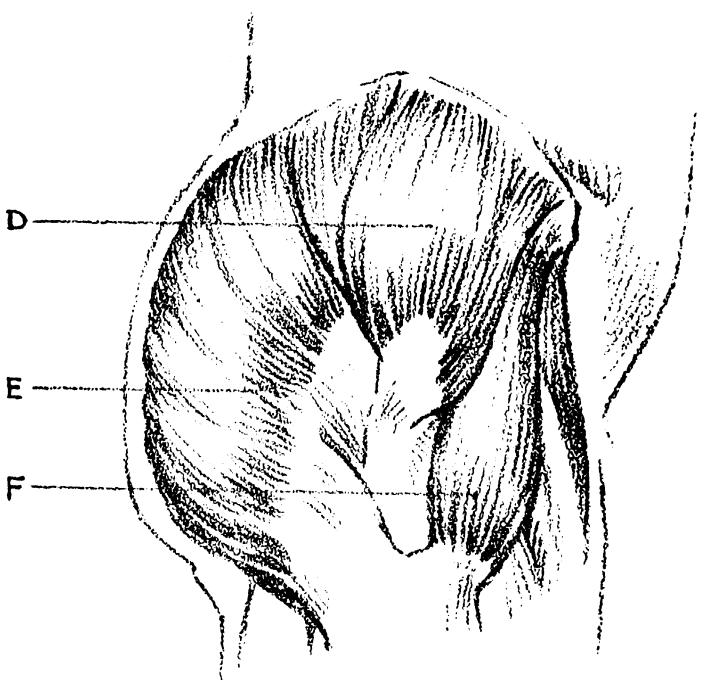
A



B



C



## MUSCLES OF THE THIGH AND LEG

## (FRONT, BACK AND SIDE VIEWS)

A — SEMITENDINOSUS — A muscle which flexes the leg upon the thigh (refer to page 14).

B — BICEPS FEMORIS — A muscle which flexes the knee and rotates it outward (refer to page 8).

C — SEMIMEMBRANOSUS — A muscle which flexes the leg and rotates it inward (refer to page 8).

D — RECTUS FEMORIS — A muscle which extends the leg (refer to page 5).

E — VASTUS LATERALIS — A muscle which extends the knee (refer to page 5).

F — VASTUS INTERMEDIUS — A muscle which extends the leg (refer to page 8).

G — PSOAS ILIACUS — Two muscles originating in the last dorsal and lumbar vertebrae and the ilium, inserting into the lesser trochanter of the femur, their action being to flex and rotate the thigh outward, flex the trunk on the pelvis, abduct and flex the lumbar spine.

H — PECTINEUS — A muscle originating in the pubis, inserting into the femur, its action being to flex, adduct and rotate the thigh outward.

I — ADDUCTOR MAGNUS — A muscle which adducts and everts the thigh (refer to page 14).

J — GASTROEMIUS — A muscle which extends the foot and flexes the leg (refer to page 6).

K — SOLEUS — A muscle which extends the foot and rotates it inward (refer to page 6).

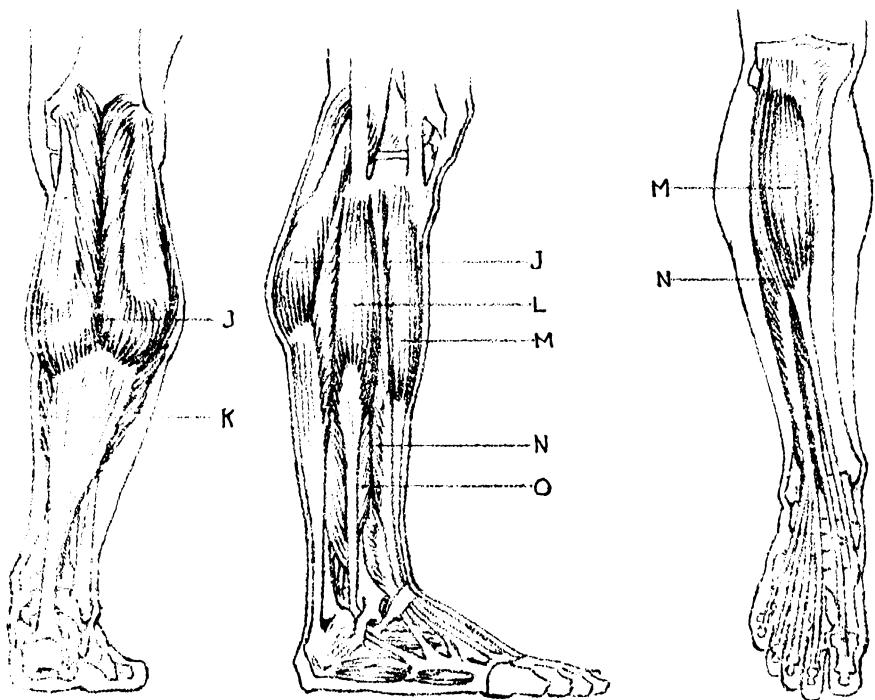
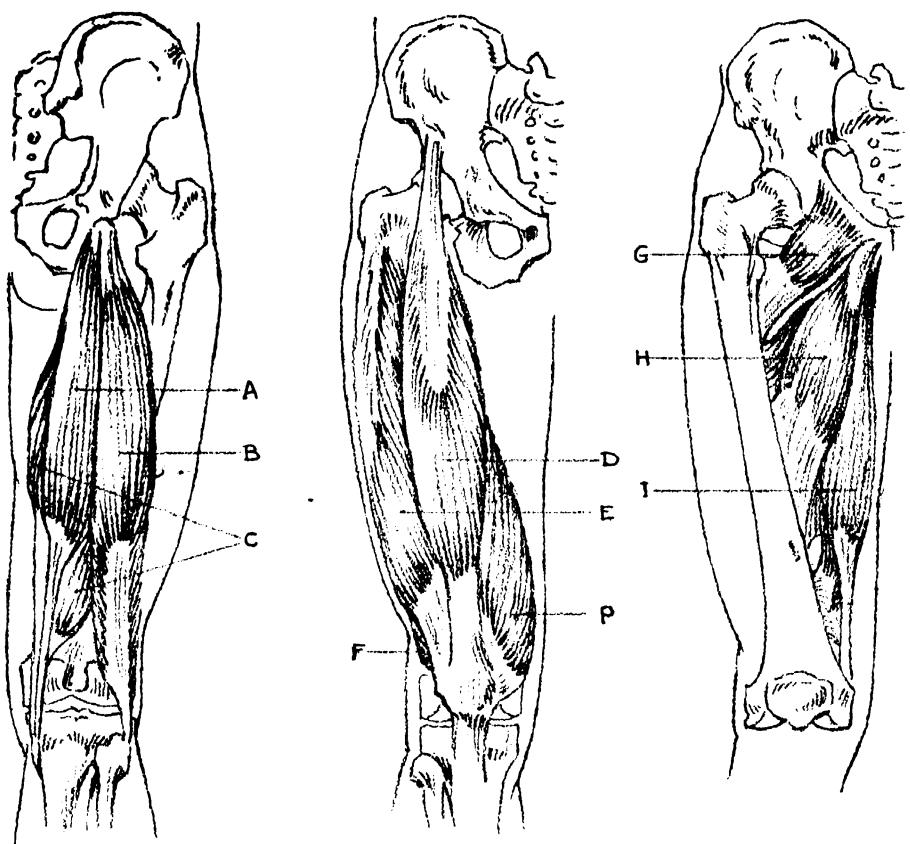
L — PERONEUS LONGUS — A muscle which extends, abducts and everts the foot (refer to page 6).

M — TIBIALIS ANTERIOR — A muscle which elevates the inner border of the foot (refer to page 6).

N — EXTENSOR LONGUS DIGITORUM — A muscle which extends the lesser toes (refer to page 8).

O — PERONEUS BREVIS — A muscle which extends the foot (refer to page 8).

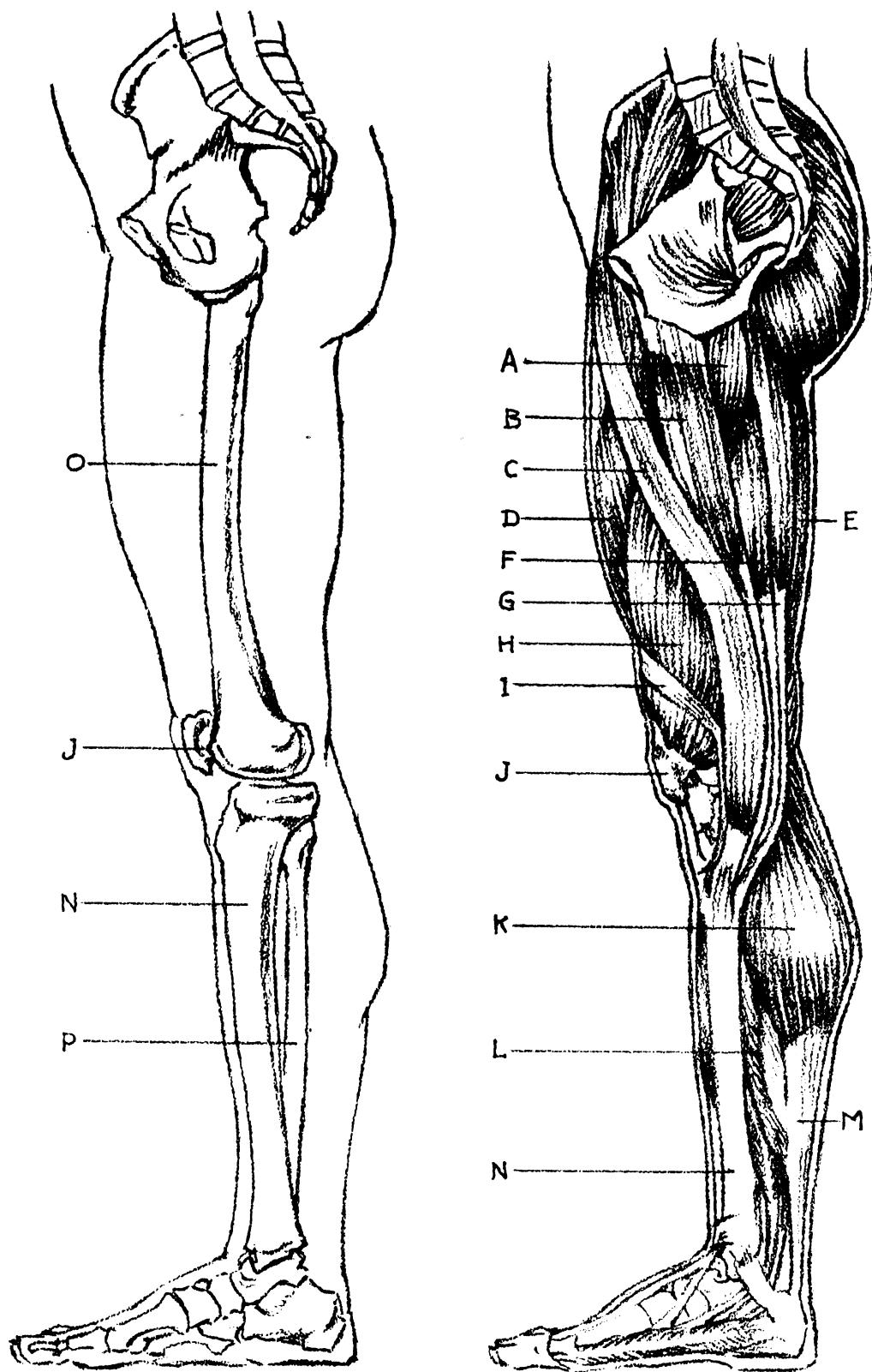
P — VASTUS MEDIALIS — A muscle which extends the leg (refer to page 6).



## BONES AND MUSCLES OF THE THIGH AND LEG

## (INSIDE VIEW)

- A — ADDUCTOR MAGNUS — A muscle which adducts and everts the thigh (refer to page 14).
- B — GRACILIS — A muscle which flexes and adducts the leg and thigh (refer to page 5).
- C — SARTORIUS — A muscle which flexes the hip and knee and everts the leg (refer to page 5).
- D — RECTUS FEMORIS — A muscle which extends the leg (refer to page 5).
- E — BICEPS FEMORIS — A muscle which flexes the knee and rotates it outward (refer to page 8).
- F — SEMIMEMBRANOSUS — A muscle which flexes the leg and rotates it inward (refer to page 8).
- G — SEMITENDINOSUS — A muscle which flexes the leg on the thigh (refer to page 14).
- H — VASTUS MEDIALIS — A muscle which extends the leg and moves the patella (refer to page 6).
- I — BAND OF RICHTER — A fibrous band running from the lower inner side of the thigh upward and outward, strengthening the thigh.
- J — PATELLA — A bone placed in front of the knee (refer to page 9).
- K — GASTROCNEMIUS — A muscle which extends the foot and flexes the leg (refer to page 6).
- L — SOLEUS — A muscle which extends the foot and rotates it inward (refer to page 6).
- M — TENDON OF ACHILLES — A tendon through which the gastrocnemius and soleus extend the foot (refer to page 15).
- N — TIBIA — Side view (refer to page 9).
- O — FEMUR — Side view (refer to page 9).
- P — FIBULA — Side view (refer to page 9).



## MUSCLES OF THE THIGH AND LEG (SIDE VIEW)

A --- **RECTUS FEMORIS** --- A muscle which extends the leg (refer to page 5).

B --- **VASTUS LATERALIS** --- A muscle which extends the knee (refer to page 5).

C --- **PATELLA** --- A bone placed in front of the knee (refer to page 9).

D --- **VASTUS INTERMEDIUS** --- A muscle which extends the leg (refer to page 8).

E --- **FEMUR** --- Lower portion shown (refer to page 9).

F --- **GASTROCNEMIUS** --- A muscle which extends the foot and flexes the leg (refer to page 6).

G --- **PERONEUS LONGUS** --- A muscle which extends, abducts and everts the foot (refer to page 6).

H --- **TIBIALIS ANICUS** --- A muscle which elevates the inner border of the foot (refer to page 6).

I --- **EXTENSOR LONGUS DIGITORUM** --- A muscle which extends the toes (refer to page 8).

J --- **GLUTEUS MAXIMUS** --- A muscle which extends, abducts and rotates the thigh outward (refer to page 8).

K --- **GLUTEUS MAXIMUS** --- A muscle which extends, abducts and rotates the thigh outward (refer to page 8).

K --- **GLUTEUS MEDIUS** --- A muscle which rotates, abducts and extends the thigh (refer to page 5).

L --- **TENSOR FASCIAE LATAE** --- A muscle which tenses the thigh (refer to page 5).

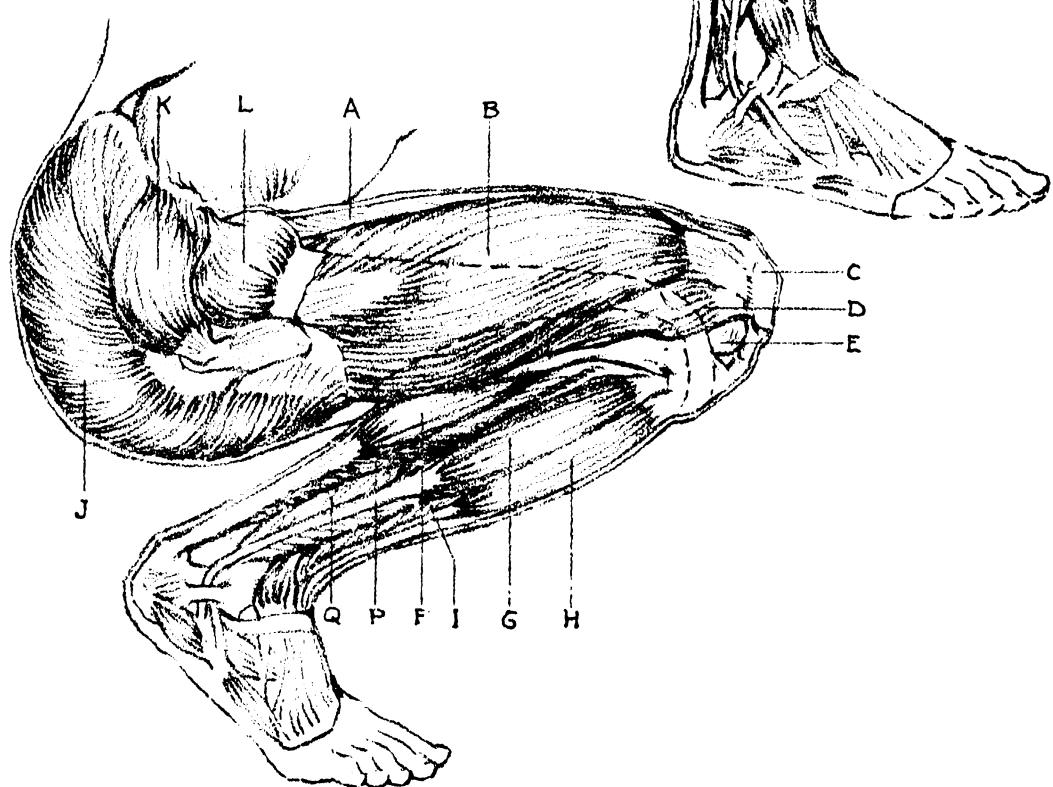
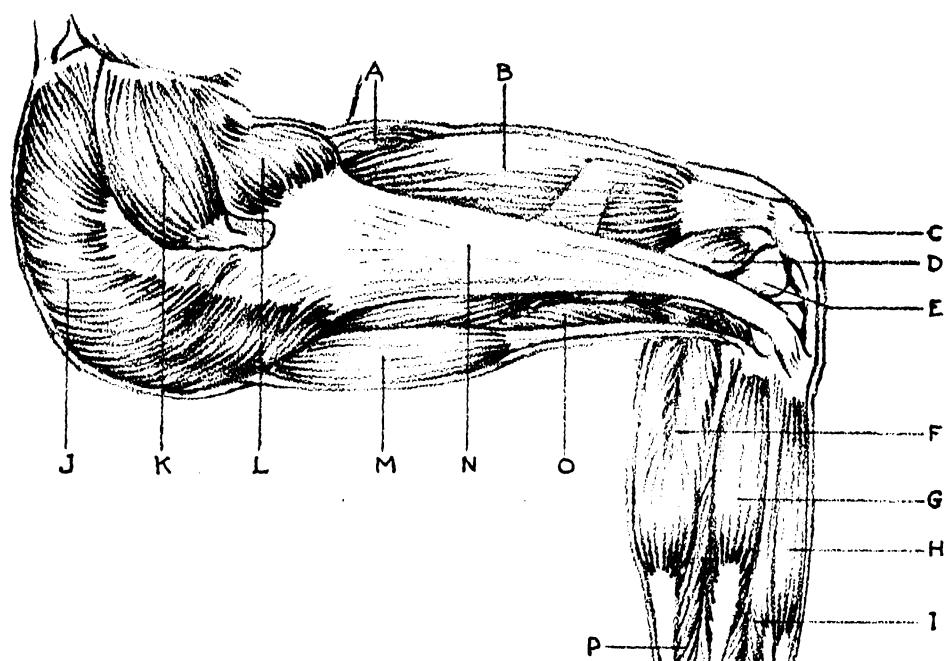
M --- **BICEPS FEMORIS, LONG HEAD** --- A muscle which flexes the knee and rotates it outward (refer to page 8).

N --- **ILIOTIBIAL BAND** --- A ligamentous band situated on the side of the thigh which strengthens the thigh and leg.

O --- **BICEPS FEMORIS, SHORT HEAD** --- A muscle which flexes the knee and rotates it outward (refer to page 8).

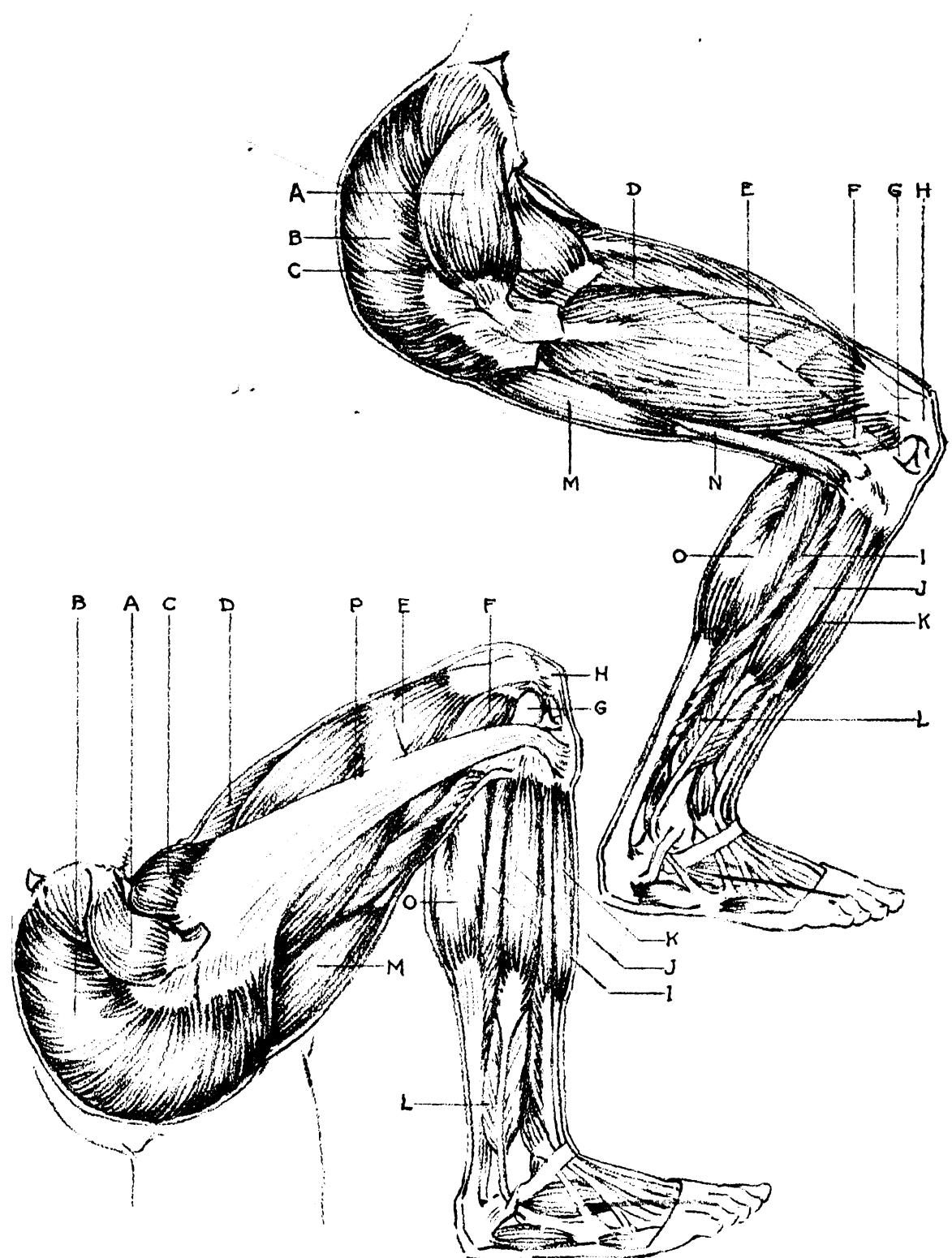
P --- **SOLEUS** --- A muscle which extends the foot and rotates it inward (refer to page 6).

Q --- **PERONEUS BREVIS** --- A muscle originating in the middle of the fibula, inserting into the fifth metatarsal bone, (see page 57), its action being to extend and abduct the foot.



## MUSCLES OF THE THIGH AND LEG (SIDE VIEW)

- A — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- B — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh (refer to page 8).
- C — TENSOR FASCIAE LATAE — A muscle which tenses the thigh (refer to page 5).
- D — RECTUS FEMORIS — A muscle which extends the leg (refer to page 5).
- E — VASTUS LATERALIS — A muscle which extends the knee (refer to page 5).
- F — VASTUS INTERMEDIUS — A muscle which extends the leg (refer to page 8).
- G — FEMUR — Lower portion shown (refer to page 9).
- H — PATELLA — A bone placed in front of the knee (refer to page 9).
- I — SOLEUS — A muscle which extends the foot and rotates it inward (refer to page 6).
- J — PERONEUS LONGUS — A muscle which extends, abducts and everts the foot (refer to page 6).
- K — TIBIALIS ANTERIOR — A muscle which elevates the inner border of the foot (refer to page 6).
- L — PERONEUS BREVIS — A muscle which extends and abducts the foot (refer to page 46).
- M — BICEPS FEMORIS, LONG HEAD — A muscle which flexes the knee and rotates it outward (refer to page 46).
- N — ~~BICEPS FEMORIS, SHORT HEAD~~ — A muscle which flexes the knee and rotates it outward (refer to page 46).
- O — GASTROCNEMIUS — A muscle which extends the foot and flexes the leg (refer to page 6).
- P — ILIOTIBIAL BAND — A ligamentous band situated on the side of the thigh which strengthens the thigh and leg.



## MUSCLES OF THE THIGH AND LEG (INSIDE VIEW)

A — **VASTUS MEDIALIS** — A muscle which extends the leg and moves the patella (refer to page 6).

B — **PATELLA** — A bone placed in front of the knee (refer to page 9).

C — **GASTROCNEMIUS** — A muscle which extends the foot and flexes the leg (refer to page 6).

D — **SOLEUS** — A muscle which extends the foot and rotates it inward (refer to page 6).

E — **TENDON OF ACHILLES** — A common tendon through which the gastrocnemius and soleus muscles insert on the os calcis or heel bone (refer to page 15).

G — **FLEXORS OF THE TOES** — Several muscles originating from the tibia and fibula, inserting into the toes, their action being to flex the toes.

H — **RECTUS FEMORIS** — A muscle which extends the leg (refer to page 5).

I — **SEMIMEMBRANOSUS** — A muscle which flexes the leg and rotates it inward (refer to page 8).

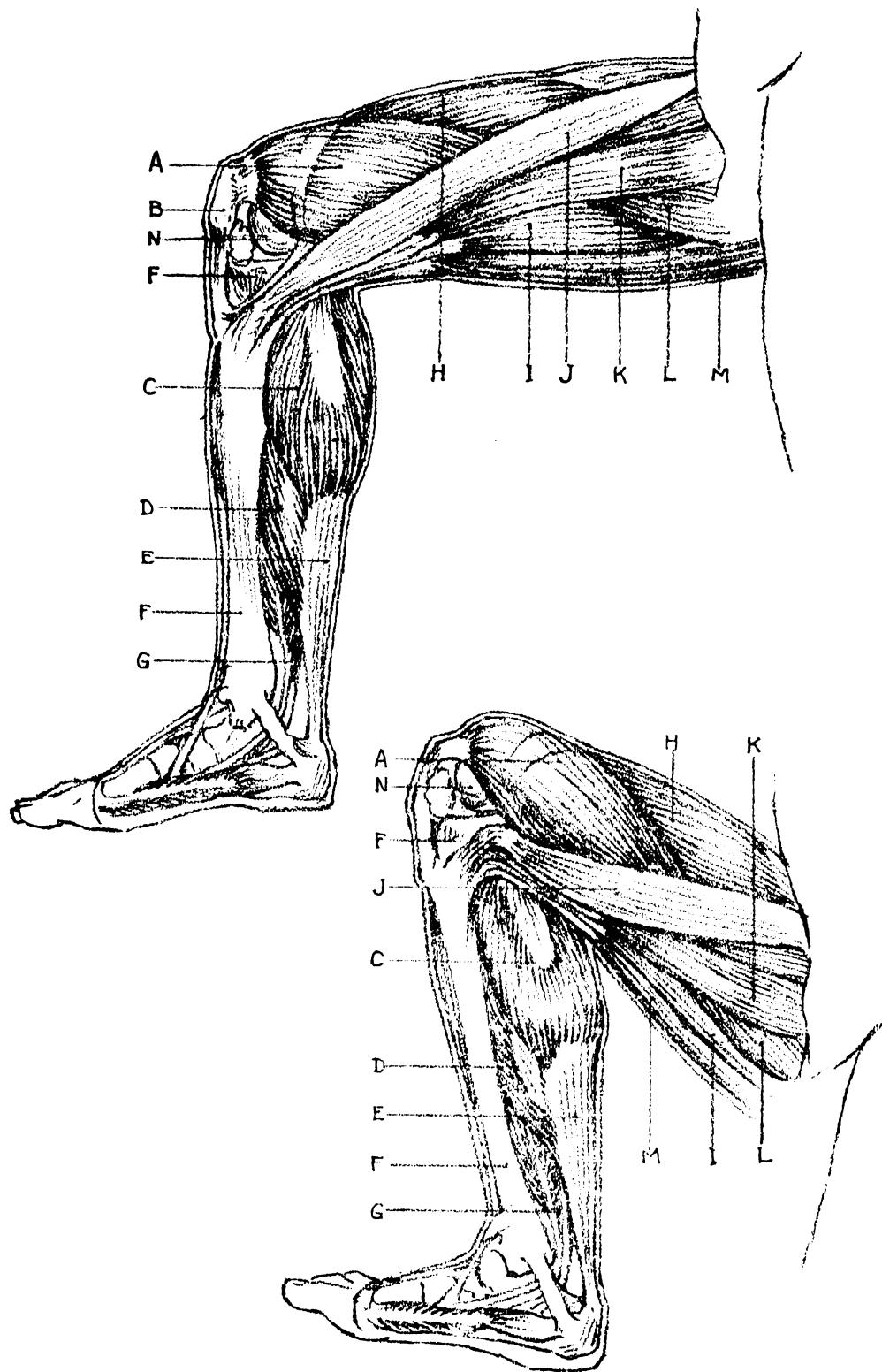
J — **SARTORIUS** — A muscle which flexes the hip and knee and rotates the leg (refer to page 5).

K — **GRACILIS** — A muscle which flexes and adducts the leg and thigh (refer to page 5).

L — **ADDUCTOR MAGNUS** — A muscle which adducts and everts the thigh (refer to page 14).

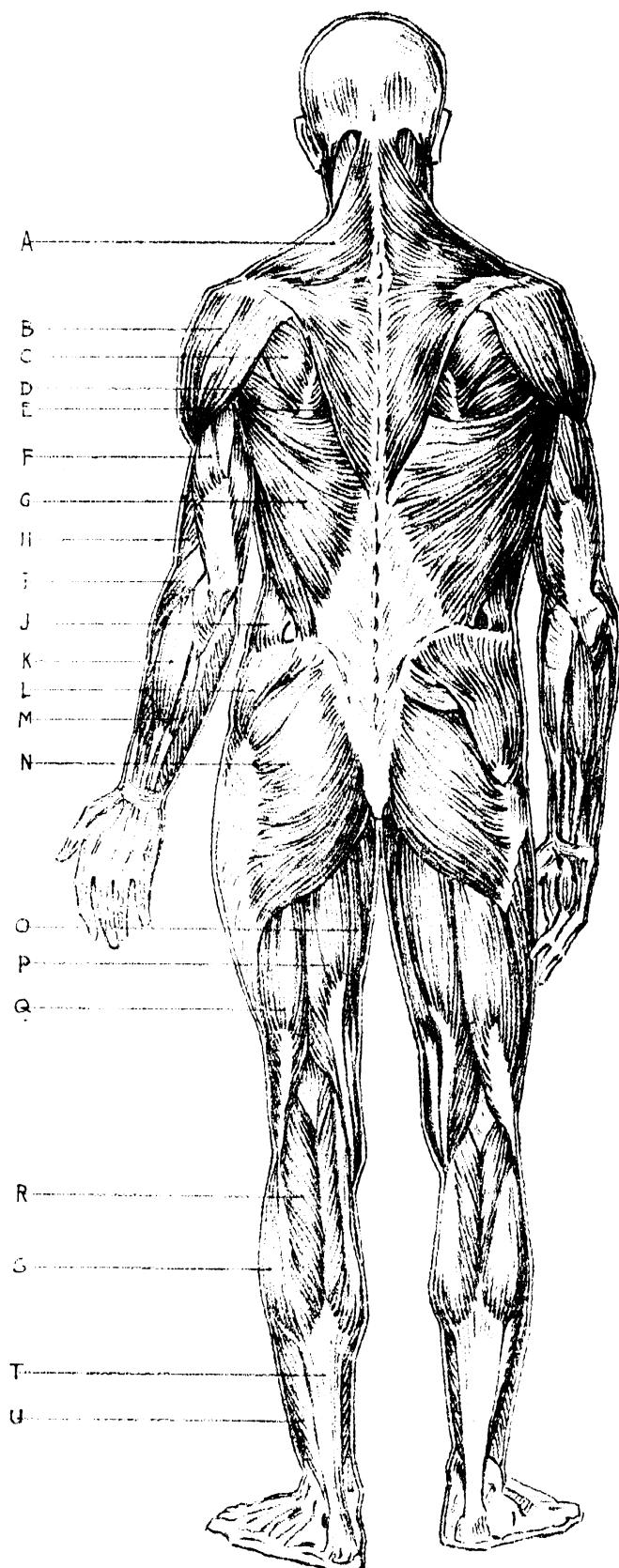
M — **SEMITENDINOSUS** — A muscle which flexes the leg on the thigh (refer to page 14).

N — **FEMUR** — Lower portion shown (refer to page 9).



## FULL FIGURE (MALE) MUSCLES OF THE BACK

- A — **TRAPEZIUS** — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- B — **DELTOID** — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- C — **INFRASPINATUS** — A muscle which rotates the arm laterally (refer to page 15).
- D — **TERES MAJOR** — A muscle which adducts, extends and rotates the arm medially (refer to page 15).
- E — **RHOMBOIDEUS** — A muscle which pulls back and elevates the scapula (refer to page 26).
- F — **TRICEPS BRACHII** — A muscle which extends the arm and forearm (refer to page 13).
- G — **LATISSIMUS DORSI** — A muscle which draws the arm downward and backward and rotates it (refer to page 10).
- H — **BRACHIALIS ANTICUS** — A muscle which flexes the forearm (refer to page 7).
- I — **BRACHIORADIALIS** — A muscle which supinates the hand and flexes the forearm (refer to page 13).
- J — **EXTERNAL OBLIQUE** — A muscle which compresses the abdomen (refer to page 5).
- K — **EXTENSOR COMMUNIS DIGITORUM** — A muscle which extends the fingers (refer to page 7).
- L — **GLUTEUS MEDIUS** — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- M — **EXTENSOR CARPI ULNARIS** — A muscle which extends and abducts the wrist (refer to page 13).
- N — **GLUTEUS MAXIMUS** — A muscle which extends, abducts and rotates the thigh outward (refer to page 8).
- O — **GRACILIS** — A muscle which flexes and adducts the leg and thigh (refer to page 5).
- P — **SEMITENDINOSUS** — A muscle which flexes the leg on the thigh (refer to page 14).
- Q — **BICEPS FEMORIS** — A muscle which flexes and rotates the knee outward (refer to page 8).
- R — **GASTROCNEMIUS** — A muscle which extends the foot and flexes the leg (refer to page 6).
- S — **PERONEUS LONGUS** — A muscle which extends, abducts and everts the foot (refer to page 6).
- T — **TENDON OF ACHILLES** — A common tendon through which the gastrocnemius and soleus muscles insert in the os calcis or heel bone (refer to page 15).
- U — **SOLEUS** — A muscle which extends the foot and rotates it inward (refer to page 6).



## MUSCLES OF THE BACK

A — COMPLEXUS — A muscle originating in the cervical and dorsal vertebrae, inserting into the occipital bone, its action being to draw back and rotate the head.

B — SPLENIUS — A muscle which rotates and extends the head and neck and flexes it sidewise (refer to page 28).

C — LEVATOR SCAPULAE — A muscle originating in the four upper cervical vertebrae, inserting into the scapula, its action being to raise the scapula and aid in rotating the head.

D — RHOMBOID MUSCLES - The muscles which pull back and elevate the scapula (refer to page 26).

E — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).

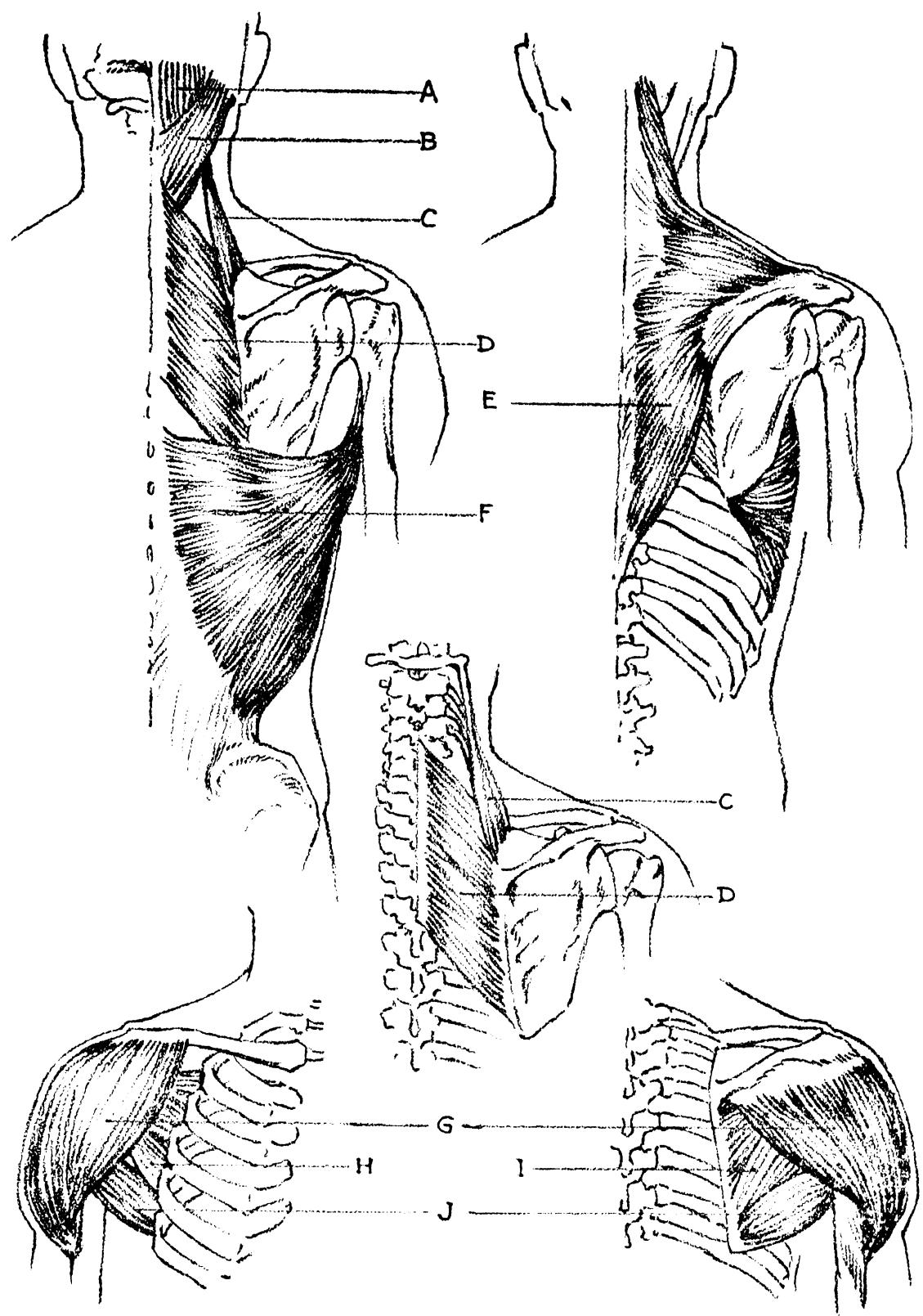
F — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

G — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).

H — SUBSCAPULARIS — A muscle originating in the scapula, inserting into the humerus, its action being to rotate the head of the humerus inward and to lower the humerus.

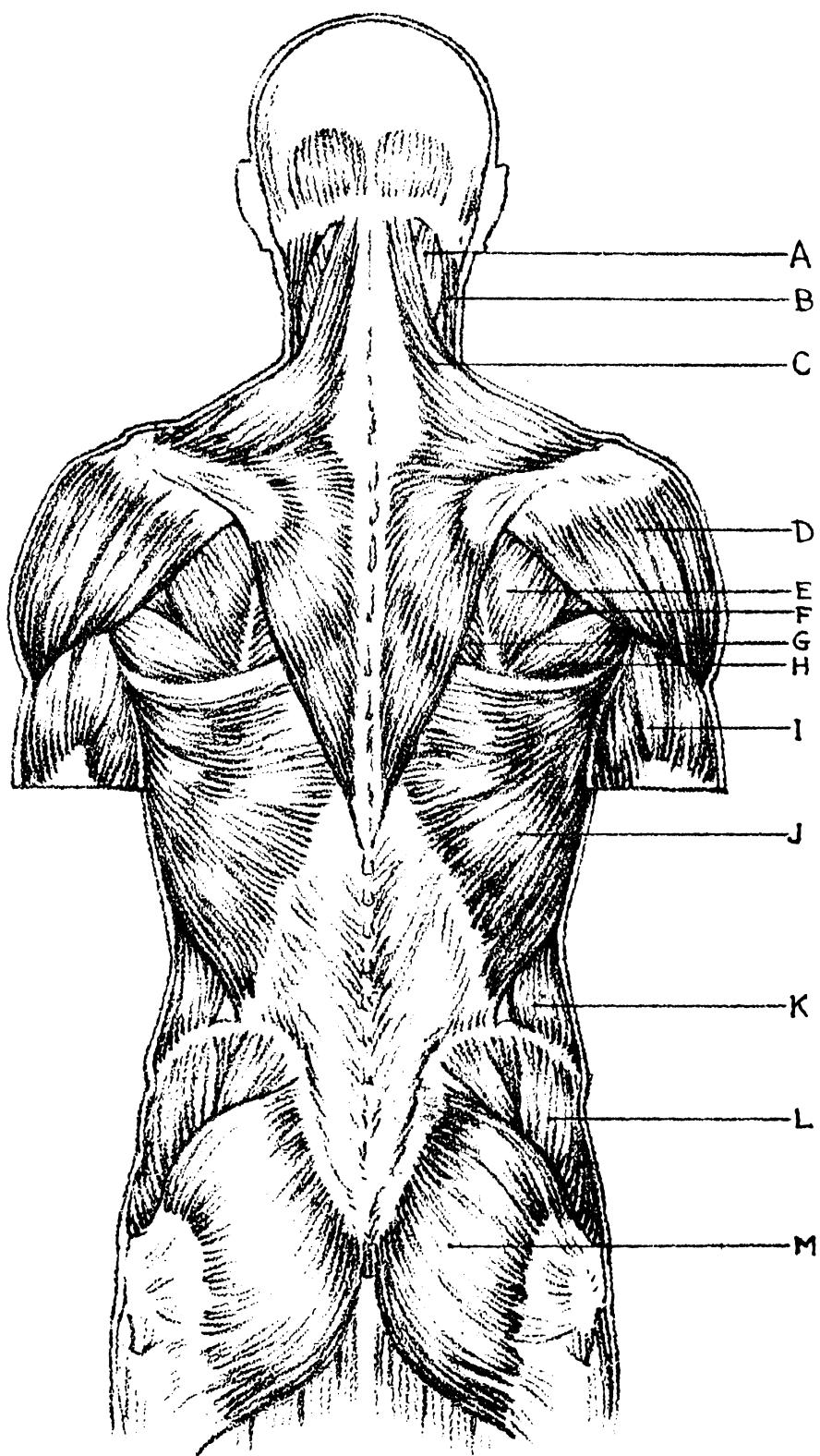
I — INFRASPINATUS — A muscle which rotates the arm laterally (refer to page 15).

J — TERES MAJOR - A muscle which adducts, extends and rotates the arm medially (refer to page 15).



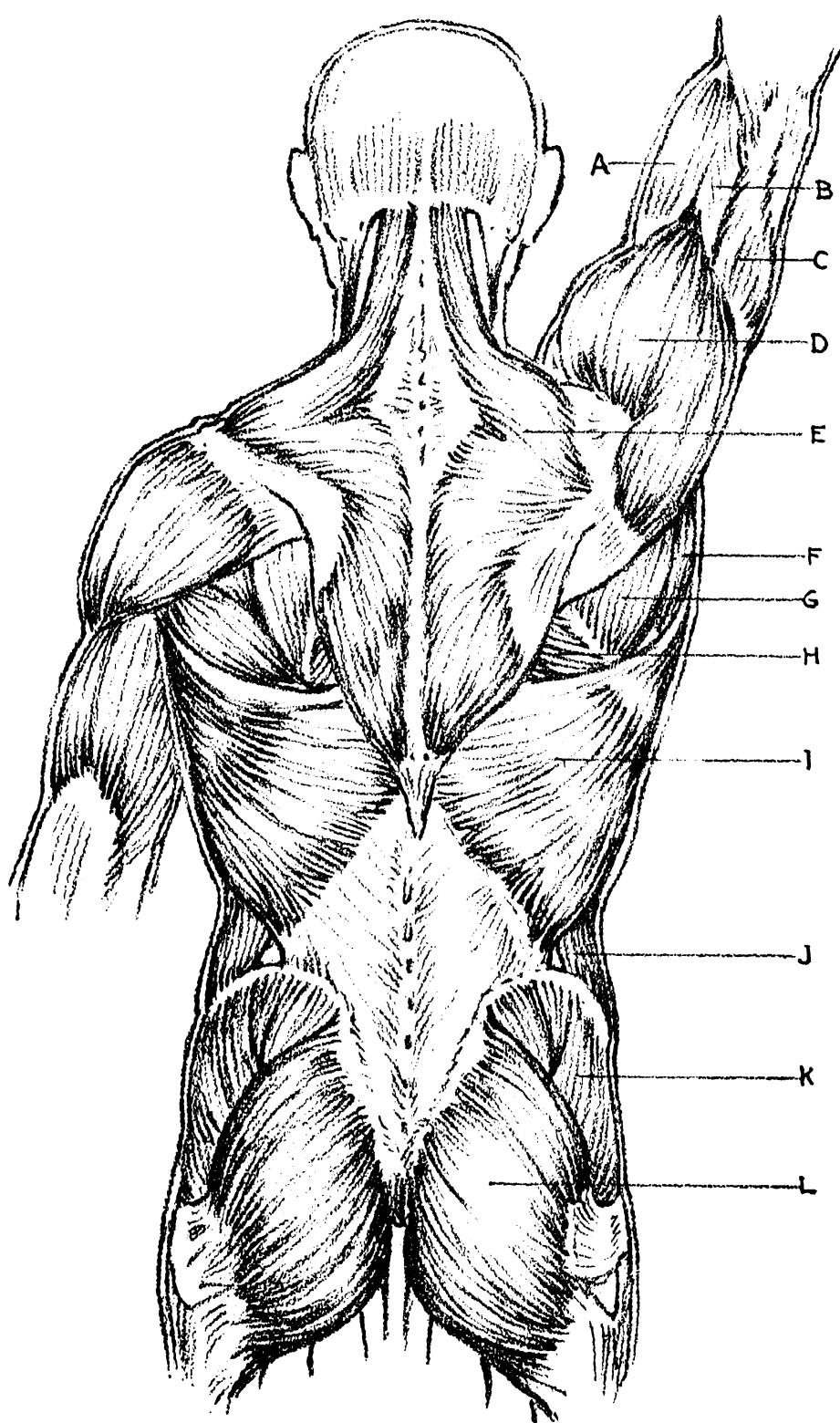
## MUSCLES OF THE BACK

- A — COMPLEXUS — A muscle which draws back and rotates the head (refer to page 50).
- B — STERNOCLEIDOMASTOID — A muscle which rotates and flexes the head (refer to page 5).
- C — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- D — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- E — INFRASPINATUS — A muscle which rotates the arm laterally (refer to page 15).
- F — TERES MINOR — A muscle which abducts the humerus and rotates it outward (refer to page 25).
- G — RHOMBOID — A muscle which draws back and elevates the scapula (refer to page 26).
- H — TERES MAJOR — A muscle which adducts, extends and rotates the arm medially (refer to page 15).
- I — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to page 15).
- J — LATISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).
- K — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).
- L — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- M — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh (refer to page 8).



## MUSCLES OF THE BACK

- A --- **BICEPS BRACHII** --- A muscle which flexes, supinates and adducts the arm (refer to page 5).
- B --- **BRACHIALIS ANTICUS** --- A muscle which flexes the forearm (refer to page 5).
- C --- **TRICEPS BRACHII** --- A muscle which extends the arm and forearm (refer to pages 7 and 13).
- D --- **DELTOID** --- A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- E --- **TRAPEZIUS** --- A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- F --- **TERES MAJOR** --- A muscle which extends, adducts and rotates the arm medially (refer to page 15).
- G --- **INFRASPINATUS** --- A muscle which rotates the arm laterally (refer to page 15).
- H --- **RHOMBOID** --- A muscle which draws back and elevates the scapula (refer to page 26).
- I --- **LATISSIMUS DORSI** --- A muscle which draws the arm downward and backward and rotates it (refer to page 10).
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## MUSCLES OF THE BACK

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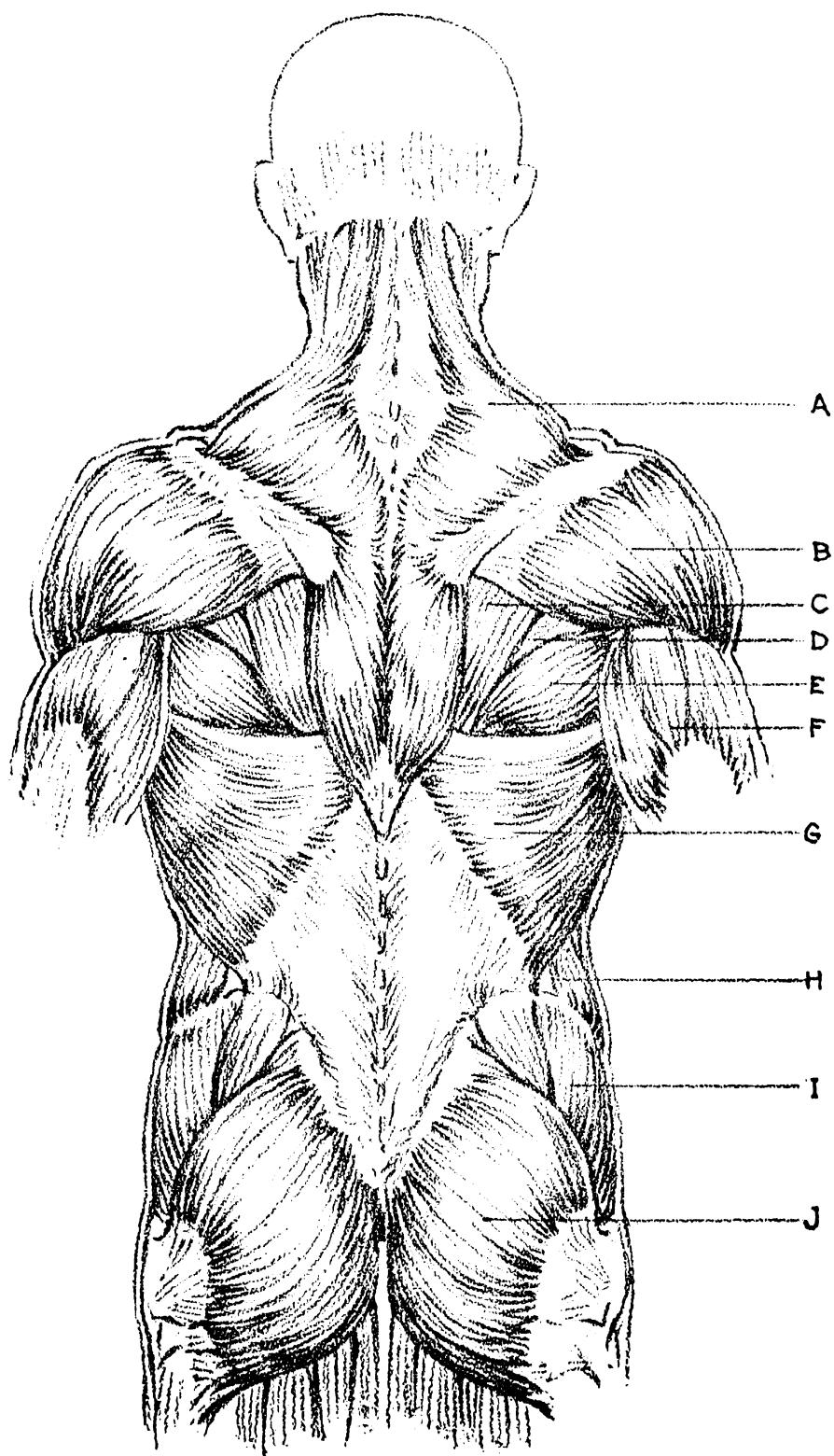
F — **TRICEPS BRACHII** — A muscle which extends the arm and forearm (refer to page 15).

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**MUSCLES OF THE BACK**

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F - **RHOMBOID MUSCLES** -- Two muscles which pull back and elevate the scapula (refer to page 26).

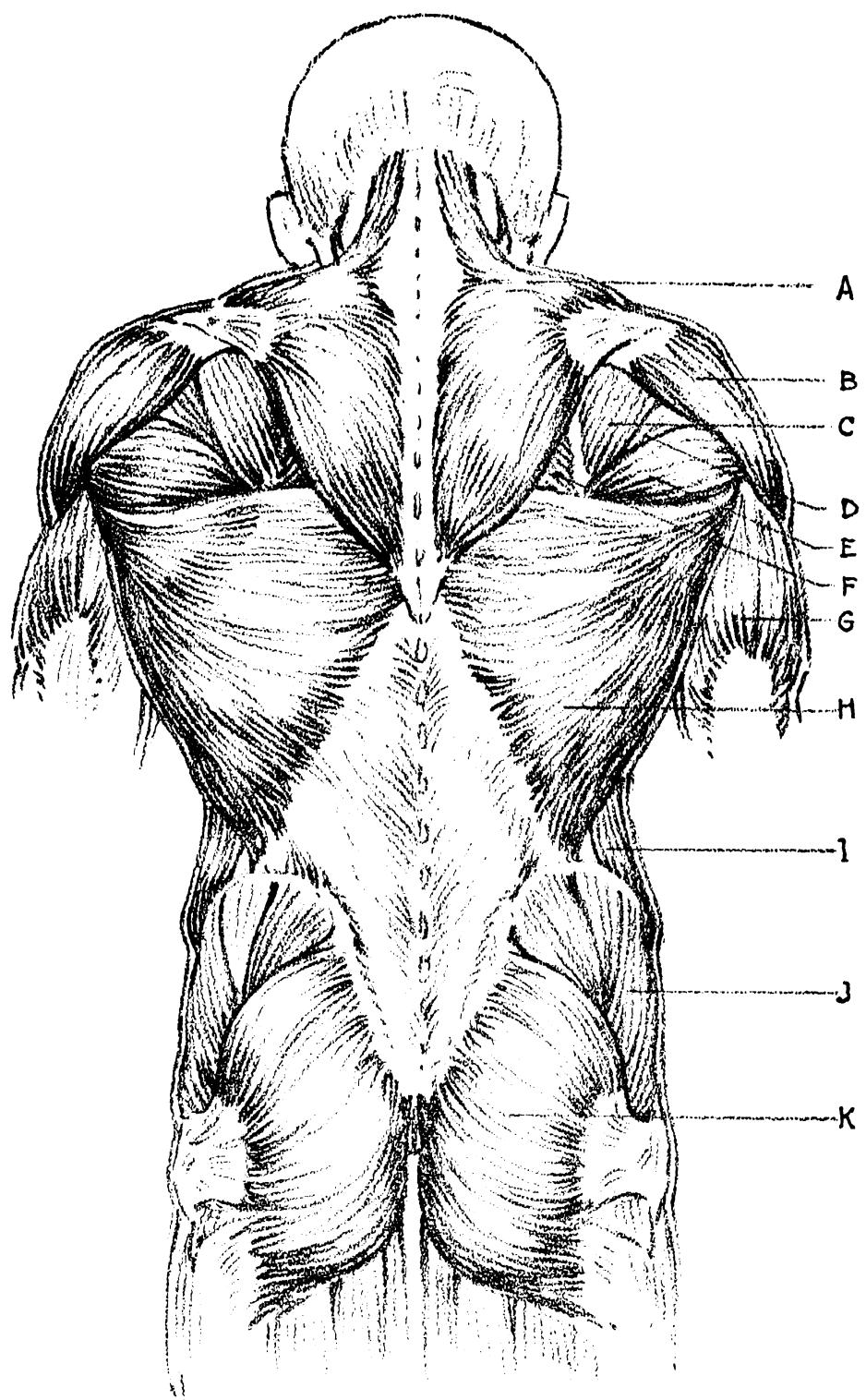
G --- **TRICEPS BRACHII** -- A muscle which extends the arm and forearm (refer to pages 7 and 13).

H - **LATISSIMUS DORSI** -- A muscle which draws the arm downward and backward and rotates it (refer to page 10).

I -- **EXTERNAL OBLIQUE** -- A muscle which compresses the abdomen (refer to page 5).

J -- **GLUTEUS MEDIUS** -- A muscle which rotates, abducts and extends the thigh (refer to page 5).

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**MUSCLES OF THE BACK**

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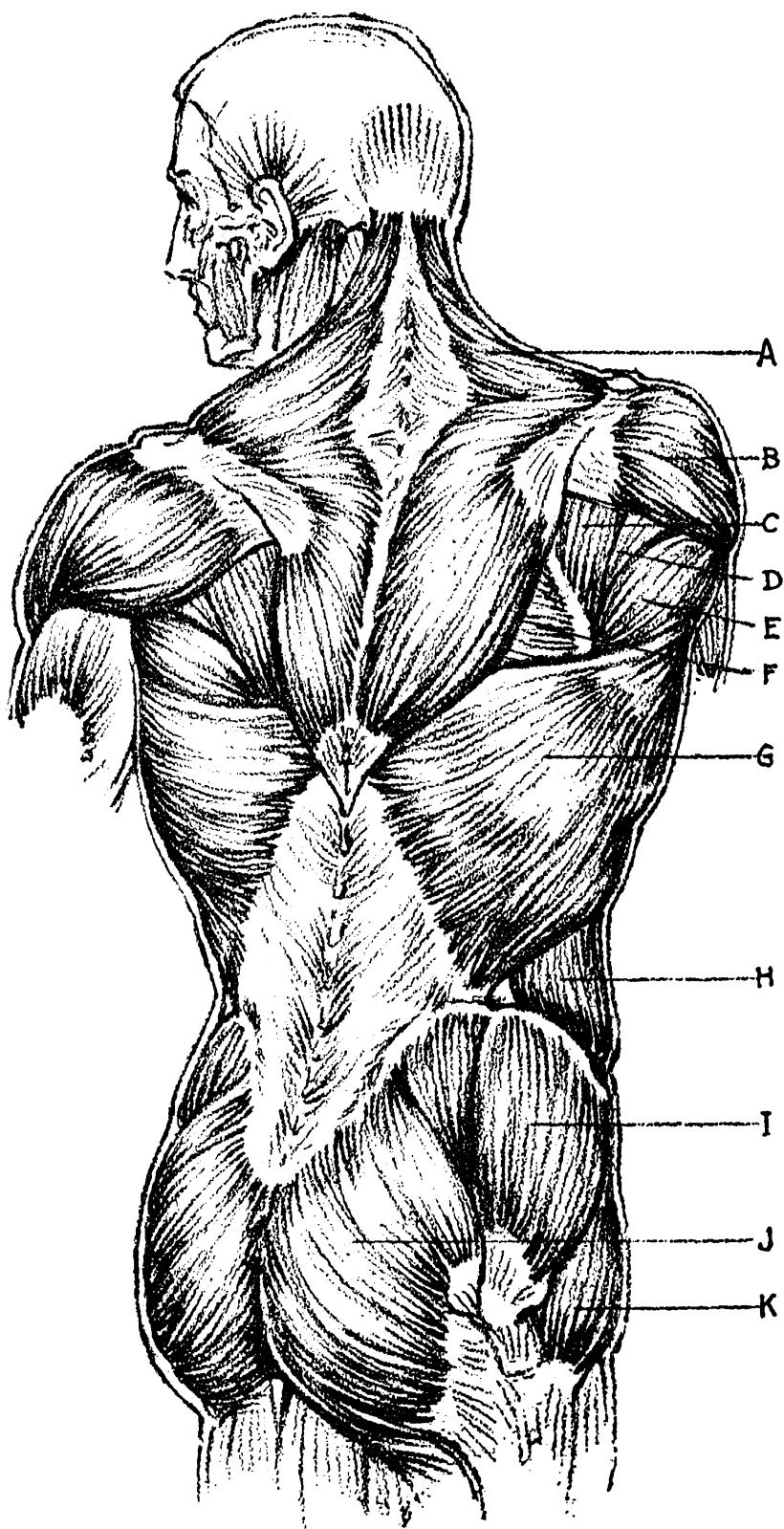
G — **LATISSIMUS DORSI** — A muscle which draws the arm downward and backward and rotates it (refer to page 10).

H — **EXTERNAL OBLIQUE** — A muscle which compresses the abdomen (refer to page 5).

I — **GLUTEUS MEDIUS** — A muscle which rotates, abducts and extends the thigh (refer to page 5).

J — **GLUTEUS MAXIMUS** — A muscle which extends, abducts and rotates the thigh (refer to page 8).

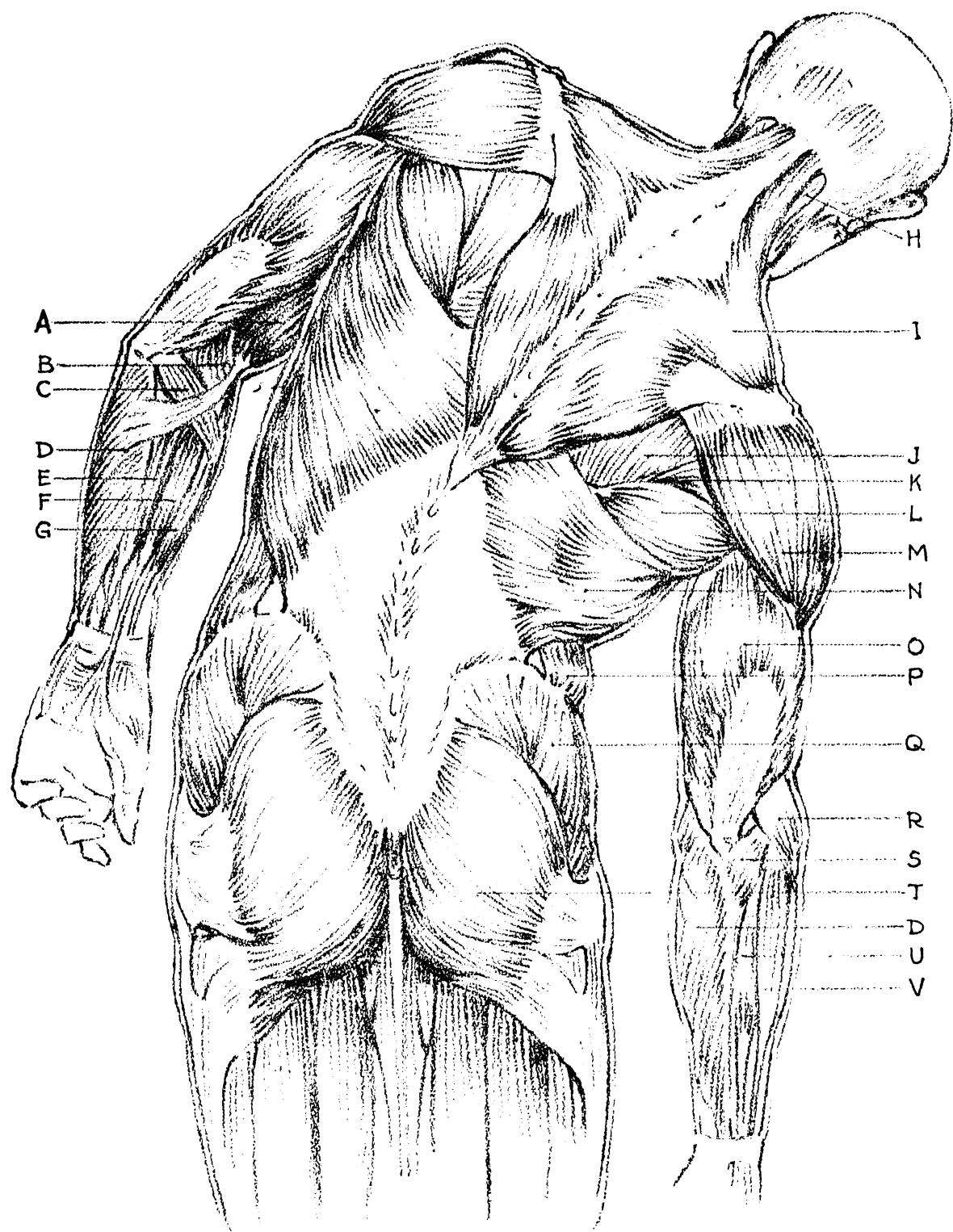
K — **TENSOR FASCIAE LATAE** — A muscle which tenses the thigh (refer to page 5).



## MUSCLES OF THE ARM, FOREARM AND TRUNK

## (BACK VIEW)

- A — BICEPS BRACHII — A muscle which flexes, supinates and adducts the arm (refer to page 5).
- B — BRACHIALIS ANTICUS — A muscle which flexes the forearm (refer to page 7).
- C — PRONATOR RADII TERES — A muscle which pronates the hand (refer to page 23).
- D — FLEXOR CARPI ULNARIS — A muscle which flexes and adducts the wrist (refer to page 13).
- E — FLEXORS OF THE HAND — Muscles which flex the fingers (refer to page 37).
- F — PALMARIS LONGUS — A muscle which stretches the palm (refer to page 16).
- G — FLEXOR CARPI RADIALIS — A muscle which flexes the wrist (refer to page 16).
- H — COMPLEXUS — A muscle which pulls back and rotates the head (refer to page 50).
- I — TRAPEZIUS — A muscle which draws the head backward and sidewise and rotates the scapula (refer to page 5).
- J — INFRASPINATUS — A muscle which rotates the arm laterally (refer to page 15).
- K — TERES MINOR — A muscle which abducts the humerus and rotates it outward (refer to page 25).
- L — TERES MAJOR — A muscle which adducts, extends and rotates the arm medially (refer to page 15).
- M — DELTOID — A muscle which raises the arm and aids in carrying it backward and forward (refer to page 5).
- N — LATTISSIMUS DORSI — A muscle which draws the arm downward and backward and rotates it (refer to page 10).
- O — TRICEPS BRACHII — A muscle which extends the arm and forearm (refer to pages 7 and 13).
- P — EXTERNAL OBLIQUE — A muscle which compresses the abdomen (refer to page 5).
- Q — GLUTEUS MEDIUS — A muscle which rotates, abducts and extends the thigh (refer to page 5).
- R — EXTENSOR CARPI RADIALIS LONGIOR — A muscle which extends the wrist (refer to pages 5 and 13).
- S — ANconeus — A muscle which extends the forearm (refer to page 7).
- T — GLUTEUS MAXIMUS — A muscle which extends, abducts and rotates the thigh outward (refer to page 8).
- U — EXTENSOR CARPI ULNARIS — A muscle which extends and abducts the wrist (refer to page 13).
- V — EXTENSOR COMMUNIS DIGITORUM — A muscle which extends the fingers (refer to page 7).



## MISCELLANEOUS VIEWS

- A — SCAPULA — Back View
- B — SCAPULA — Side View
- C — SCAPULA — Inner View

Called the shoulder blade; it can be clearly seen as a large flat triangular bone. The scapula together with the clavicles connecting the arms with the trunk are sometimes called the shoulder girdle, just as the bones making up the pelvic ring form the pelvic girdle. The shoulder girdle is important in giving freedom of movement to the arms.

- D — STERNUM — The breastbone shown from the front
- E — STERNUM — The breastbone shown from the side.  
The female sternum is shorter than that of the male (refer to page 3).

- F — CLAVICLE — Shown from above
- G — CLAVICLE — Side view
- H — CLAVICLE — Shown from below

The collarbones form the front part of the shoulder girdle and are placed horizontally at the upper part of the chest. Each presents a double curve flattened from above downward and is situated immediately above the first rib (refer to pages 3, 6, 13, and 23).

I — OS CALCIS — The heel bone is the largest of the bones in the foot, and is situated at the lower and back part of the foot. This bone serves to transfer the weight of the body to the ground (top view and side views shown).

I — METATARSAL BONES — Consist of five long bones which join the phalanges in the front part of the foot.

K — PHALANGES OF THE FOOT — Consist of 14 bones, the very foremost extremities having expanded surfaces for support of the nails and pulp of the toes.

L — PLANTAR APONEUROSIS — Dense fibrous tissue on the sole of the foot.

M — ABDUCTOR MINIMI DIGITI — A muscle between the undersurface of the heelbone and the little toe which bends the little toe inward.

N — FLEXOR BREVIS DIGITORUM — A muscle between the heel bone and the little toes which bends the little toes.

O — ADDUCTOR HALLUCIS — A muscle between the heel bone and the great toe which bends the great toe.

P — FLEXOR BREVIS MINIMI DIGITI — A muscle between the fifth metatarsal bone and the phalanx of the little toe which bends the little toe.

Q — FLEXOR BREVIS HALLUCIS — A muscle originating in the undersurface of the tarsal bone, inserting into the great toe, its action being to bend the great toe.

R — RADIUS — The bone of the forearm shown at its lower portion (refer to pages 4 and 7).

S — Ulna — The bone of the forearm shown at its lower portion (refer to pages 4 and 7).

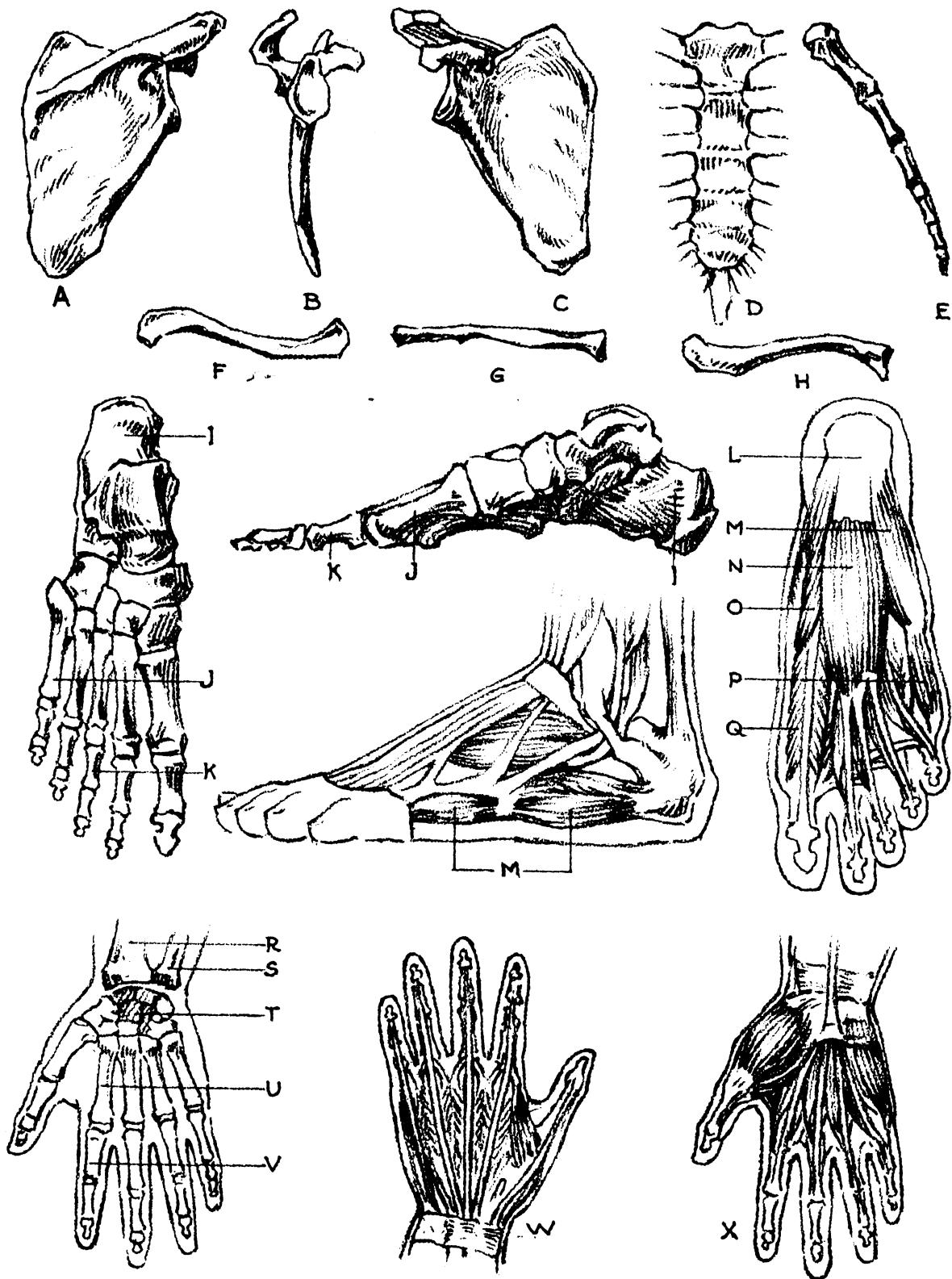
T — CARPAL BONES — These are eight bones placed in two rows which comprise the wrist.

U — METACARPAL BONES — These are five bones between the carpal bones and the phalanges.

V — PHALANGES OF THE HAND — These are the finger bones of which there are fourteen in number, three to each finger and two to the thumb.

W — BACK VIEW OF THE HAND.

X — INNER VIEW OF THE HAND (PALM).



# GLOSSARY

## EXPLANATIONS OF ANATOMICAL DIRECTIONS AND LOCATIONS

anterior	in front
posterior	behind, in back
internal	inside
external	outside
inferior	lower
superior	upper
lateral	to the side
medial	middle
median line (mid-line)	the center line of the body and the center lines of the extremities

## ANATOMICAL MOVEMENTS

abduct	to draw or bend away from mid-line
adduct	to draw or bend toward the mid-line
elevate	to lift up
extend	to unbend
evert	to turn or twist about
depress	to lower
flex	to bend
pronate	to turn face down
supinate	to turn face up
rotate	to twist or revolve

## PRONUNCIATION AND COMMON MEANING OF MEDICAL TERMS

### Bones

Term	Pronunciation	Meaning
acromion	ak-ro'-me-on	tip of shoulder
carpal	kar'-pal	wrist
cervical	ser'-vik-al	pertaining to the neck
clavicle	klav'-ik-l	key, collar bone
coccygeal	kok-sij'-e-al	pertaining to the coccyx
coccyx	kok'-siks	cuckoo (resembling the bill), tail bone
condyle	kon'-dil	knuckle
coracoid process	kor'-ak-oid	beak-shaped process of the scapula
coranoid process	kor'-o-noid	crown-shaped or crow-shaped
femur	fe'-mur	thigh bone
fibula	fib'-ü-lah	buckle
frontal	front'-al	in front, belonging to the forehead
humerus	hü'-mer-us	bone of upper arm
hyoid	hí'-oid	u-shaped bone
ilium	il'-e-um	flank, hip
ischium	is'-ke-um	hip, bone upon which the body rests in sitting
lumbar	lum'-bar	pertaining to the loins
malar	ma'-lar	cheek
mandible	man'-dib-l	lower jaw
mastoid	mas'-toid	breast-shaped

GLOSSARY — (*Continued*)

<i>Term</i>	<i>Pronunciation</i>	<i>Meaning</i>
metacarpal	met-ah-kar'-pal	beyond the wrist
metatarsal	met-ah-tar'-sal	beyond the instep
nasal	na'-zal	nose
occipital	ok-sip'-it-al	back part of skull
olecranon process	o-lek'-ran-on	process of ulna at elbow
os calcis	os kal'-sis	heel bone
parietal	par-i'-et-al	wall
patella	pat-el'-ah	shallow dish, knee pan
pelvis	pel'-vis	basin
phalanges	fa-lan'-jez	line of soldiers
pubis	pu'-bis	pubic bone
radius	ra'-de-us	spoke or ray of wheel
ramus	ra'-mus	branch
sacral	sa'-kral	pertaining to the sacrum
sacrum	sa'-krum	holy bone, sacred
scapula	skap'-ū-lah	spade, shoulder blade
sternum	ster'-num	breast bone
temporal	tem'-por-al	temple, time
thoracic	tho-ras'-ik	pertaining to or situated in the chest or thorax
tibia	tib'-e-ah	shin bone, flute
trochanter of femur	tro-kan'-ter of the fe'-mur	wheel of pulley
ulna	ul'-nah	cubit
zygomatic	zi-go-mat'-ik	pertaining to the cheek bone

## Muscles

<i>Term</i>	<i>Pronunciation</i>	<i>Meaning</i>
abductor minimi digiti	ab-duk'-tor min'-imi dig'-iti	leader away of little fingers
adductor hallucis	ad-duk'-tor hal-lu'-cis	bender of the great toe
adductor longus	ad-duk'-tor long'-us	long muscle which brings thigh to mid-line
adductor magnus	ad-duk'-tor mag'-nus	large muscle which brings thigh to mid-line
anconeus	ang-ko-ne'-us	pertaining to the elbow
auricular	aw-rik'-ū-lar	pertaining to the ear
biceps brachii	bi'-seps bra'-kī	double-headed muscle of the arm
biceps femoris	bi'-seps fe-mor'-is	double-headed muscle of the thigh
bicipital fascia	bi-sip'-it-al fash'-e-ah	insertion band of the biceps muscles
brachialis anticus	bra-ke-a'-lis an'-tik'us	pertaining to the front of the arm
brachioradialis	bra-ke-o-ra-de-al'-is	from arm to the radius
buccinator	buk'-sin-a-tor	trumpeter
complexus	kom-pleks'-us	complex
coracobrachialis	kor-ak-o-bra-ke-al'-is	from coracoid (beak-like) process of scapula to brachium or arm
deltoid	de-ltoid	delta or triangular-shaped
depressor labii inferioris	de-pres'-or la'-bī in-fe-re-or'-is	depressor of lower lips

GLOSSARY — (*Continued*)*Term*

extensor carpi radialis longior

extensor carpi radialis brevior

extensor carpi ulnaris

extensor communis digitorum

extensor longus digitorum

external oblique

flexor brevis digitorum

flexor brevis hallucis

flexor brevis minimi digiti

flexor carpi radialis

flexor carpi ulnaris

frontalis

gastrocnemius

gluteus maximus

gluteus medius

gluteus minimus

gracilis

iliotibial band

infraspinatus

internal oblique

latissimus dorsi

levator labii superioris

levator menti

levator scapulae

mammary glands

masseter

nasalis

occipitalis

amohyoid

orbicularis oculi

obicularis oris

palmaris longus

patellar ligament

pectineus

pectoralis major

pectoralis minor

peroneus brevis

peroneus longus

plantar aponeurosis

platysma

posterior annular ligament

procerus

pronator

pronator radii teres

*Pronunciation*

eks-ten'-or kar'-pi

ra-de-a'lis lon'-ji-or

eks-tens'-or kar'-pi

ra-de-a'-lis brev'-i-or

eks-tens'-or kar'-pi ul-na'-ris

eks-tens'-or kom-ū'-nis dij-it-o'-rum

eks-tens'-or long'-us dij-it-o'-rum

in-ter'-nal ob-lék'

fleks'-or brev'-is dij-it-o'-rum

fleks'-or brev'-is hal-lü'-sis

fleks'-or brev'-is min'-im-i dij'-it-i

fleks'-or kar'-pi ra-de-a'-lis

fleks'-or kar'-pi ul-na'-ris

fron-ta'-lis

gas-trok-ne'-me-us

gloo'-te-us maks'-im-us

gloo'-te-us me'-dius

gloo'-te-us min'-im-us

gras'-il-is

il'-e-o-tib'-e-al

in-frah-spi-na'-tus

in-ter'-nal ob-lék'

lat-is-im-us dor'-si

le-va'-tor la'-be-i sū-pe-re-or'-is

le-va'-tor men'-ti

le-va'-tor scap'-ū-lay

ma'-mar-ē

mas'-e-ter

na-zal'-is

ok-sip-it-a'-lis

o-mo-hi'-oid

or-bik-ū-la'-ris ok'ū-li

or-bik-ūl-a'-ris o'-ris

pal-ma'-ris long'-us

pat-el'-ar lig'-am-ent

pek-tin-e'-us

pek-tor-a'-lis ma'-jor

pek-tor-a'-lis mi'-nor

per-o-ne'-us brev'-is

per-o-ne'-us long'-us

plan'tar ap-o-nū-ro'-sis

plat-iz'-mah

pos-te'-re-or an'-ū-lar lig'-am-ent

pro-se'-rus

pro-na'-tor

pro-na'-tor ra'-de-i te'-rez

*Meanings*

long extender of the wrist

short extender of the wrist

extender of wrist on ulnar side

common extender of fingers

long extender of fingers

slanting outside abdominal muscle

short bender of fingers

short bender of great toe

short bender of little finger

forearm muscle that bends wrist

forearm muscle on ulnar side that bends wrist

of the forehead

frog's belly

largest muscle of buttock

middle muscle of buttock

lesser muscle of buttock

slender, delicate

band between ilium and tibia

below spine of scapula

slanting internal muscle of the abdomen

broadest muscle of back

lifter of upper lip

muscle which lifts skin of chin

lifter of shoulder blades

pertaining to the breast

chewer

pertaining to the nose

base of head

pertaining to both scapula and hyoid

(u-shaped) bone

circular muscle of eye

circular muscle of mouth

long muscle of palm

pertaining to kneecap ligament

pertaining to attachment on public bone

pertaining to greater muscle of breast

pertaining to smaller muscle of breast

short muscle arising from fibula

long muscle arising from fibula

fibrous membrane on sole of foot

broad, expanded

ling-like ligament surrounding back of wrist and ankle

stretched out, long

placing in prone position

pronator of forearm and hand

GLOSSARY — (*Continued*)

<i>Term</i>	<i>Pronunciation</i>	<i>Meaning</i>
psoas iliacus	so'-as il-i'ak-us	pertaining to flank and loin
rectus abdominis	rek'-tus ab-dom'i-nus	straight muscle of the abdomen
rectus femoris	rek'-tus fem'or-is	straight muscle of the thigh
rhomboideus	rom-boid'e-us	quadrilateral
sartorius	sar-to'r-e-us	tailor's muscle, used in crossing legs
scalenus	ska-le'nus	irregular, triangular, uneven
semimembranosus	sem-e-mem-bra-no'sus	half membranous
semitendinosus	sem-it-en-din-o'sus	half tendinous
serratus magnus	ser-a'-tus mag'nus	large saw-toothed
soleus	so-le'u-s	pertaining to the sole
splenius	sple'-ne-us	bandage-shaped
sternocleidomastoid	ster-no-klī-do-mas'-toid	attaching to sternum, clavicle and mastoid bones
sternohyoid	ster-no-hī'-oid	pertaining to sternum and hyoid (u-shaped bone)
sternothyroid	ster-no-thī'-roid	pertaining to sternum and thyroid (i.e. shield-like)
subscapularis	sub-skap-ū-la'-ris	beneath the scapula
temporal fascia	tem'-po-ral fash'-e-ah	pertaining to fibrous membrane of the side of the head
temporalis	tem-po-ra'lis	temple
tendon of Achilles	ten'-don of ak-il'-ēz	tendon where the Greek hero, Achilles, was vulnerable (from Greek mythology)
tendon of triceps	ten'-don of tri'-seps	tendon of three-headed muscle
tensor fasciae latae	ten'-sor fash'-e-ay lah'-tay	broad band, holder or tightener
teres major	te'-rez ma'-jor	larger round muscle
teres minor	te'-rez mi'-nor	smaller round muscle
tibialis anticus	tib-e-a'-lis an'-ti-kus	in front of tibia
transversalis abdominis	trans-ver-sal'-is ab-dom'in-is	muscle of the abdomen running transversely
triangularis	tri-ang-gūlā'-ris	triangular muscle
trapezius	tra-pe'ze-us	table-shaped
triceps brachii	tri'-seps bra'kī	three-headed muscle of the arm
vastus intermedius	vas'-tus in-ter-me'di-us	big muscle between vastus medius and vastus lateralis
vastus lateralis	vas'-tus lat-er-al'is	big muscle outside
vastus medius	vas'-tus mē-di-us	big muscle inside





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